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ON THE BREEDING HABITS OF SOME ARIZONA BIRDS.

BY W. E. D. SCOTT.

FOURTH PAPER. *Vireo vicinior*.

THE investigation of the bird fauna of the cañon described in detail in the first paper of this series proved so interesting that I was rarely tempted outside of a very limited region during that part of the year 1884 preceding October 1, and a number of species that did not attract my attention at all during that period proved not only to be abundant on the mesas and foot-hills of the region immediately adjoining, but were of the greatest interest on account of their heretofore supposed rarity. Chief among these birds stands the Arizona or Gray Vireo (*Vireo vicinior*), of which, so far as I can learn, only about a dozen individuals have been procured since its discovery and description by Dr. Coues in 1866. This species, on the San Pedro River foot-hills of Las Sierras de Santa Catalina, at an altitude ranging from 2800 to 4000 feet (which is here the point of meeting of the mesquite timber and the evergreen oaks), is, excepting the Least Vireo (*Vireo pusillus*), the commonest form of Vireo, being fairly abundant, as the following notes will show.

The two altitudes mentioned seem to be about the limits of the species while breeding, and most of the birds secured were

obtained between 3000 and 3500 feet altitude. Once, during the season of 1884, on June 26, I met with the Arizona Vireo. This one had probably strayed rather outside of the usual range, and was at a considerably higher altitude — well within the oak belt — than any since obtained. The locality where the species is most abundant is where the mesquites terminate and the oaks begin; there being of course a sort of gradual transition and no well or clearly defined line, the two forms of trees being mingled about equally. I have found that the smooth flat mesas, and the broad open bottoms of the wider cañons are quite as much frequented by them as the rough and broken hillsides, and it is difficult to ride about anywhere between the altitudes above mentioned, without hearing the very characteristic song of the species. In the trees and bushes they rarely go higher than fifteen feet from the ground, and though I have several times seen them on the ground, yet the limbs about ten feet from it seem to be the most frequented. The birds are exceedingly active, and, though not very shy, are difficult to procure, for as soon as one tree or bush has been well and very rapidly hunted over for food, a rather long flight, not by any means to the nearest tree or bush, is made; and by the time the collector is in range again the song is very likely to be heard at considerable distance.

This song is clear and liquid in character, and is kept up so continually as to betray the presence of the male bird, which I believe monopolizes it, even a quarter of a mile away, under favorable circumstances. It is composed of single whistling notes, generally delivered rather slowly, and seemingly with hesitation, and in an abstracted way, as if the performer were thinking the while of other affairs; and yet frequently this sort of abstraction seems cast aside, and the same series of notes are given with a precision and brilliancy that calls to mind a fine performance of a Scarlet Tanager, or even of a Robin.

The first arrival in my neighborhood this year (1885) was on April 1, when I took a male in full song. This was in a pretty rolling grass country, where the trees are rather scattered, and at an altitude of 3500 feet. The next day another male was secured, and I think the arrival must have become general by the 10th to 12th, though, as I was called away about this time, I cannot be positive. On my return I went to the pine woods of this vicinity, and so my note book says nothing about Gray Vireos for more

than a month; for, on my return from the pines, about May 1, I was fully occupied with looking after some of the rarer Hummingbirds.

My notes take up the story of this species again on May 19, when I surprised myself by taking three males, and began to realize that another rarity among my bird neighbors was possibly common. Of this I became sure in a few days, as I took four more males on the 20th, and seven males again on the 26th of May, though it was not until the 31st of the month that I secured a female of the species, although my series then included twenty-four male birds. Among the seven individuals procured on the 26th of May were two young males that had just left the nest and were under the care of the male parent bird. So the first breeding must begin very soon after the arrival of the species.

On this day, too, I found a nest, to be presently described, which was just finished. I saw both parents, the female sitting on the nest, and the male singing in the bushes close at hand. The female was very tame, and in order to see the interior of the nest I was obliged to touch her with my fingers before she would leave her home. Several times afterwards, in watching the progress of laying, I was obliged to repeat this action, and once had to lift the bird out of the nest. On May 26, when I discovered the nest, then apparently finished, it contained no eggs, although the female was sitting very close, as I have described. Daily visits to the spot showed the same circumstances obtaining until May 30, when the first egg was laid; and then an egg was laid daily until June 2, when the laying was completed, four eggs being in this case the full set. Thus the female, after the nest was apparently completed, was constantly sitting on the nest, it being all the time empty, for four days. The habit of sitting on a finished nest for a considerable time before *any* eggs are laid also obtains among certain other species of this region, and seems, from my experience, very characteristic of the Arizona Jay (*Aphelocoma sordida arizonæ*); but of this I shall have more to say in detail in another place.

On the 2d of June I took this nest, then containing four eggs, as well as both the parent birds (Nos. 2714 ♀, and 2711 ♂), the female being taken from the nest in my hand. And also on the same day, at a point about a mile distant, I obtained a second nest containing young, three in number, about ready to leave the

nest. On June 4 I found a pair of these birds just starting to build; but this was the second brooding, as the female of the pair, which I took before I discovered the nest, clearly showed. And also on this day I found the first *fully fledged* young shifting for themselves. June 6 was the date on which I found a second nest containing three eggs, slightly incubated, the female of this nest being catalogued as No. 2757. On the same day I also found a completed nest on which the female was sitting, as before described, but which contained *no* eggs as yet, and it being at rather a remote point I did not visit it again.

My notes as to time of nesting are concluded on June 11, when I found a pair just beginning a nest, and another pair with a nest about half finished, both nests being situated in mesquites about seven feet from the ground, in smooth, flat country, at an altitude of about 3500 feet.

From the nests obtained, which are before me as I write, and from notes as to their location, etc., I append the following details.

Nest of June 2. Built in a kind of thorn bush, almost at the extremity of one of the upper and overhanging branches, six feet from the ground. It is composed externally of the dry outside skin or bark of a coarse kind of grass, rather loosely woven. But immediately beneath this loose, external layer is a wall of the same material, very closely and strongly woven. The lining of the nest, which is very distinct from the walls, extends throughout the interior. It is much thicker on the bottom of the structure, but extends up to the rim, where, however, it is thin. It is composed of fine dry grasses, arranged on the sides of the nest in concentric layers, much as the horse-hairs are placed in the nest of *Spizella domestica*. On the bottom this arrangement does not obtain, but the grasses cross one another seemingly at random, forming a soft mat. The walls are uniformly about one-fourth of an inch in thickness, and the shape of the entire structure is that of a half sphere. The external diameter at the rim is two and three-fourths inches, and the diameter at the same point inside is two and one-quarter inches. The depth outside is two inches, and inside one inch and three-quarters. The nest is attached at the rim for almost the entire circumference very much like a Red-eyed Vireo's nest, but here the resemblance ceases, for it is not fastened to the many

small twigs, on which it rests, that pass diagonally downward, so that it is not even a semi-pensile structure. The thorns of the bush, which are from an inch and a half to two inches long and very sharp, protect the nest in every direction, for the whole is entirely surrounded by twigs and small branches. Its contents are four eggs, rather rounded in general shape, though one end is somewhat sharper than the other. The ground-color is rosy when fresh, becoming a dead white when blown, rather sparsely spotted with irregularly shaped dark umber brown dots, chiefly at the larger end. One of the eggs is unfortunately too badly broken to measure, but is not apparently very different from the other three, which measure, respectively, $.77 \times .59$, $.78 \times .58$, and $.75 \times .57$ inches. This nest was obtained on the side of a hill near the bottom of a rather broad cañon, at an altitude of 3500 feet. The structure is, as a whole, very symmetrical, but is widely different from that of other Vireos which breed in the neighborhood.

The nest of June 2, which contained three young, was built in a mesquite, growing on a little mesa in flat country, the altitude being about 3500 feet. It was not quite six feet from the ground, and is composed externally much like the last, with the addition of some thin broad shreds of mesquite bark to the material already described. It is not at all symmetrical, however, and presents a rather careless appearance as a whole. It is built near the centre of the tree, in a upright V, formed by two upright limbs, the larger being an inch and the smaller five-eighths of an inch in diameter. But the rim is attached for almost half an inch of its circumference to a small twig, which, reaching out from another branch at considerable distance, crosses the two upright limbs forming the V at right angles. The attachment to this small twig, it will be noticed, is very slight, and on the other side of the nest the rim is attached for an inch to a twig which makes out from the larger of the two upright limbs. The bottom of the nest outside does not quite rest in the angle of the V, but the sides rest firmly against the limbs forming it, and the result is a Vireo's nest resting in a crotch, and in no degree pensile. The largest external diameter is three and the smallest two and a half inches; the walls are exceedingly thin except at the rim and bottom, and loosely constructed. The largest interior diameter is two and five-eighths and the smallest two and one-

eighth inches. The exterior depth is two inches and a quarter and the interior depth one inch and three quarters.

The nest of June 6, which will complete the present series, was found in a locality similar to the nest first described, at an altitude of 3000 feet. It was built in a 'catclaw'—a kind of small mesquite—four feet from the ground. The situation was at the extremity of a branch in a horizontal V-shaped fork, to which two-thirds of the rim is fastened, the other third being free. But considerable support was afforded, directly underneath the nest, by a small twig, which is fastened into the structure. The materials do not vary from those of the first nest of June 2 already described, either inside or out, except that a few downy feathers are added to the lining. The whole is a symmetrical half-sphere in shape. External diameter, two and three-fourths inches; interior diameter, two and one-fourth inches. Exterior depth, two inches; interior depth, one inch and three-quarters. It contained three slightly incubated eggs, which do not vary in color from those already described, except that the spots are of a slightly redder brown, and they are more concentrated at the larger end. The eggs are rather smaller and even more rounded in general shape than the other set spoken of, being but little more pointed at one end than at the other. They measure $.72 \times .53$, $.70 \times .55$, and $.68 \times .53$ inches, respectively.

My series of this species at present numbers fifty-four specimens—forty-two males and twelve females—all taken, with the one exception noted above, between April 1 and June 11 of the present year. They present very little variation in size or color, and the young in first plumage do not differ materially from the adult birds.

LIST OF BIRDS OBSERVED IN SUMMER AND FALL ON THE UPPER PECOS RIVER, NEW MEXICO.

BY H. W. HENSHAW.

THE observations embodied in the following list were made during the interval between July 18 and October 28, 1883, by

Mr. E. W. Nelson and the writer, in the mountains about forty miles east of Santa Fé, New Mexico. As faunal lists of the birds of New Mexico are yet by no means as numerous as is desirable, and as the summer avifauna of the region embraced in our observations is almost or quite unknown, I have thought it worth while to present them to the consideration of the readers of 'The Auk.'

For the time above indicated, and for an area of country of say five square miles, it is believed our examination was extremely thorough, and it is doubtful if a single species breeding within that area escaped notice. Although equal attention was paid to the fall migrants, it is not impossible that by rapid movements a few species which chanced to occur in small numbers may have passed by unheeded.

At first sight the list will appear to be remarkable for what it does not contain rather than for what it does, and there are few traces in it of the richness usually associated with Arizona and New Mexican bird lists. That the cause of its meagreness in species, and the absence of southern forms may be clearly understood, it is necessary that the nature of the country be thoroughly comprehended.

The Pecos River winds the greater part of its long and tortuous course through the state of Texas, emptying into the Rio Grande. Rising, as it does, in the mountains of New Mexico, it might be thought that its course would furnish a readily travelled highway from the Rio Grande Valley for Texan and possibly for Mexican species. Possibly in the lower part of its course it may afford such a highway, but the list will show that no intrusion of Texas birds towards its sources takes place, and — so far as the mountain part of its course is concerned — the reason is readily apparent; for, in following its windings, no sooner do we reach the mountains than we find a new climate and an entirely new character of country, and one of forbidding aspect to lowland-loving species. For the greater part of its course, especially in Texas, it flows a sluggish stream confined between low banks, the vegetation of which is limited to low willows and scrub, with here and there groves of cottonwoods. As it nears the mountains the scene changes, as if by magic. First come foot-hills, thickly clothed with piñons and cedars — typical home of the Piñon and Woodhouse Jays. Ere many miles the stream begins to cañon, and thence on the pines and spruces begin to put in an appear-

ance, until, fifteen miles above the foot-hills, it cuts its way through a deep course, with extremely picturesque walls of rock, and with every element of the wild mountain scenery which accompanies its cañons to its sources. The water, when undisturbed by the frequent summer rains, is clear and cold, and, like most similar mountain streams, harbors great numbers of fine trout. Even in midsummer the temperature of the region is cool and refreshing, the natural effect of low latitude being counteracted by the altitude, and even more by frequent prolonged rains and thunder showers, which latter are often accompanied by hail. These showers are of almost daily occurrence (or were in 1883) from about the middle of July till the first of October.

The focus of our operations was at the junction of a small tributary — Willow Creek — with the main stream, some twenty miles from Glorietta, on the Atchison, Topeka, and Santa Fé Railroad. Glorietta may be taken as representing the foot-hill region, with which the present paper has nothing to do.

The character of the vegetation that clothes the mountain ridges is essentially sub-alpine. The elevation at the mouth of Willow Creek is about 7800 feet, but the ascent from this point is extremely rapid, whether the main stream be followed or any of the side cañons, which form beds for the numerous rivulets that make their way on all sides from the heights above.

The highest mountain in the vicinity is Mt. Baldy, which is distant some twenty miles from the mouth of Willow Creek, and 12,661 feet above sea level. This peak we were not able to visit, though it is not probable that any very marked change takes place in the character of the avifauna in so short a distance.

At the height of our camp (7800 feet) a luxuriant growth of pines covers the hills, giving way, a thousand feet higher, though not wholly, to the spruces. On many of the gentle slopes, the pines are thinly dispersed, and are so scattered, or gathered in picturesque groups, as to convey the idea of artificially arranged parks — a suggestion still further heightened by the sward of green grass, enlivened with patches of bright flowers. The summits of many of the smaller heights are almost entirely bare of trees and shrubbery, and are covered with a luxuriant growth of grasses, affording the finest sort of pasturage. The sides of many of the ridges and cañons are heavily clothed with brush, mainly of scrub oak. At a height of about 7500 feet, scattered aspens be-

gin to put in an appearance, and soon assert a place for themselves in the shape of large groves. Wherever fire has devastated the pine tracts the fire-cleared space is immediately occupied by aspens, which spring up in the shape of extremely dense thickets — so dense that in them the vision is limited to the space of a very few feet. These are the favorite haunts of deer and bear. Everywhere the streams are densely fringed with brush of various sorts, chiefly, however, willows and alders, and it is these thickets that form the chief resort for the smaller birds. Flowers of many kinds and of various hues are visible on all sides, and no sooner is one species through flowering than another takes its place. In short, the flora is of the character usually pertaining to mountain areas of low latitude where a deep and fertile soil, added to a copious rainfall, combine to produce an abundant vegetation.

Our observations began sufficiently early (July 18) to make sure of all the summer residents, and they were continued until the close, or near the close, of the fall migration, the first indications of which were noticed about August 1.

I was particularly interested in ascertaining the exact time of the beginning of the fall migration, but it is a matter of no little difficulty to determine, in the case of a given locality, just when the first movement southward begins; nor is it less difficult in the case of a given species of bird. Among the smaller birds, the first act in the final drama of migration is the assemblage of individuals into flocks, either of one or of many species. But this gathering begins as soon as the young are fairly on the wing, and, in the instance of many species, before the young are strong enough to travel. It is quite certain that the small birds generally do not undertake the fall journey until the old ones have somewhat recuperated from the effects of family cares, and until the young have gained their full strength. But, so far as observation of these flocks goes, there is little to be learned, since it is practically impossible to determine whether the flocks under observation from day to day consist of the same individuals, or are fresh arrivals from farther north. For instance, on our arrival, July 18, many of the Nuthatches and Audubon's Warblers had already gathered into flocks of old and young, and while in flocks the young passed from the nestling into fall plumage, and the adults donned their fall dress. There was thus an interval of probably three weeks before any of them migrated, if indeed the Nut-

hatches migrated at all. The observer is conscious of a general movement among the small birds, but it is difficult to tell whether it is actual migration or not until certain evidence presents itself in the arrival of species previously unnoticed. So, at least, it was in the present case; and the first supposed migrating visitor was seen August 8 — a single Wilson's Flycatcher (*Myiiodictes pusillus*). Previous to this, however, there had been a movement on the part of the Hummingbirds, which was disclosed by the sudden departure of the males of *Selasphorus platycercus*, which took place about August 1, and constituted the first positive evidence of the fall migration.

After August 8 the tokens of a general movement on the part of the birds became perfectly evident; and soon flocks of birds from farther north put in an appearance. At this time the birds, instead of being scattered through the woods, according to the exigencies of nesting, were gathered into large flocks, composed of the most heterogeneous elements. Bluebirds, Nuthatches, Titmice, Warblers, Creepers, Snowbirds, and Woodpeckers, all trooped through the forest together, and where one moment reigned perfect silence, the next was enlivened by a chorus of chirps and call-notes, the signals by which the motley throng is held together in an ever moving but united band. As the fall advanced, these flocks were of less frequent occurrence and contained a smaller number of species, as well as of individuals, until towards the end of October, when they were composed mainly of Snowbirds, Nuthatches, and such species as intended to winter not far away.

The list pretends to be nothing but a record of our own observations, and whatever value it may possess will be derived mainly from the fact that it contains no species but those actually seen, and leaves those which were not seen to be added by the labors of future investigators.

1. *Hylocichla ustulata swainsoni*. SWAINSON'S THRUSH. Fairly numerous in fall. First appeared September 13.

2. *Hylocichla unalascae*. DWARF THRUSH. — Rare; in fall only. A single specimen secured October 12.

2 a. *Hylocichla unalascae auduboni*. ROCKY MOUNTAIN HERMIT THRUSH. — Numerous as a summer resident. The young were out of the nest July 18.

3. *Merula migratoria propinqua*. WESTERN ROBIN. — Was not detected breeding, although it probably summers here. Common in fall.

4. *Cinclus mexicanus*. AMERICAN WATER OUZEL. — Numerous all along the upper Pecos. By July 18, the time of our arrival, young birds

were able to care for themselves, though not yet fully divested of the nestling plumage. Abandoned nests were seen on ledges of rock overhanging the stream, and one pair had built on a stringer beneath a bridge.

5. *Sialia mexicana*. CALIFORNIA BLUEBIRD. — A numerous summer resident. Apparently the *S. arctica* does not breed here.

6. *Myiadestes townsendi*. TOWNSEND'S SOLITAIRE. — Numerous. Families of young birds in the curious mottled plumage, resembling young Thrushes, were being led through the pines by the old birds during the last half of July. The season of song had entirely passed.

7. *Regulus calendula*. RUBY-CROWNED KINGLET. — Young birds in nestling plumage were taken August 17 to September 11. This was the first intimation received that the species was present. It doubtless nested among the spruces, well up on the ridges. Abundant in fall.

8. *Parus montanus*. MOUNTAIN CHICKADEE. — Numerous summer resident; mainly confined to the evergreens.

9. *Parus atricapillus septentrionalis*. LONG-TAILED CHICKADEE. — Also numerous. Much more frequently seen among deciduous trees than the preceding. Both were conspicuous in fall among the gatherings of small birds.

10. *Sitta carolinensis aculeata*. SLENDER-BILLED NUTHATCH. — Abundant summer resident among the pines.

11. *Sitta pygmæa*. PIGMY NUTHATCH. — Extremely abundant. As soon as the young are out, the different families come together, and birds of various hatchings may be shot from the same flock. I was unaware how much time this species spends on the ground. In a large flock there are always more or less of its members searching on the ground for insects.

12. *Helminthophaga celata*. ORANGE-CROWNED WARBLER. — Fairly numerous in the breeding season, but more so during the fall migration. It seems a little curious that the *H. virginiae*, which breeds abundantly in middle Colorado, was not detected here at all. It may possibly summer in the foothills, and it doubtless occurs among them in the migrations.

13. *Dendroeca æstiva*. YELLOW WARBLER. — The presence of this species was detected — that was all. Farther down the river it was doubtless more common.

14. *Dendroeca gracæ*. GRACE'S WARBLER. — This species was one I confidently expected to find as a summer resident. Nevertheless, it was not discovered until after the fall flight had commenced, and the assumption is that all the specimens taken, perhaps half a dozen, came from farther north.

15. *Dendroeca auduboni*. AUDUBON'S WARBLER. — This Warbler breeds abundantly through the pine woods. Young birds were out of the nest July 18, and we saw them gradually assume the fall plumage, as well as the old change to their winter dress.

16. *Dendroeca townsendi*. TOWNSEND'S WARBLER. — This is well known as a Pacific coast species, and one not ascertained to breed anywhere in the Rocky Mountain Region. It made its appearance from the

north in considerable numbers about August 25. By September 20 it began to be uncommon. The last individual was seen September 28. It was always found associated with flocks of various other birds, and chiefly frequented the pines. The disproportionate number of young birds over old ones was very noticeable, not more than half a dozen of the latter being seen.

It would be interesting to know from just what source these Rocky Mountain migrants are derived, and why if, as seems probable, they come from the Sierras, they select this route instead of taking a due southern course. The species is unknown in the Rocky Mountains in spring, except along the southern border.

17. *Geothlypis macgillivrayi*. MACGILLIVRAY'S WARBLER. — This is another species which, as a summer resident, was to be expected. Not one was seen, however, until the bird appeared from the north, which it did the last days of August. In early September it became fairly common in the thickets along the streams.

18. *Myiodioctes pusillus*. WILSON'S BLACKCAP. — So far as we could ascertain, this bird did not breed in the locality. The first one was seen August 8. It soon became extremely numerous; nowhere, in fact, have I ever seen it so abundant. It was found in every flock of migrants, and also in companies of half a dozen or more among the alders and willows of the streams.

19. *Vireo gilvus swainsoni*. SWAINSON'S VIREO. — Fairly numerous as a summer resident, though by no means so common as it is farther north. This locality may be, in fact, near the extremity of its southern limit in summer.

20. *Vireo solitarius plumbeus*. PLUMBEUS VIREO. — Rather common in summer, but not nearly so numerous as the bird is at this season in Colorado and other points to the northward. Almost exclusively restricted to the pines.

21. *Vireo solitarius cassini*. CASSIN'S VIREO. — This is another Pacific coast form, many individuals of which, for some unexplained reason, choose to reach their southern winter quarters by way of the Rocky Mountains rather than to follow the Sierras, where alone it is known to breed. It also is not known to occur in the Rocky Mountains in spring, except in the extreme southern portion of the range. It was first seen September 2 and soon became fairly numerous. It was found in the pines moving about with the Warblers and other migrating birds, but it also frequented the aspens and oak brush. It was a noticeable fact that while this bird was quite silent, the Plumbeous Vireo, which was now moulting its worn summer plumage, prior to moving south, was frequently in song, being, in fact, the only species that was so.

22. *Lanius ludovicianus excubitoroides*. WHITE-RUMPED SHRIKE. — A single bird was shot among some dead timber well up on a mountain ridge. The bird seemed to be quite out of place among its surroundings, and was, I presume, nothing but a straggler from the lower regions eastward.

23. *Tachycineta thalassina*. VIOLET-GREEN SWALLOW. — This, the only Swallow spending the summer in this locality, or in fact occurring at all, was extremely numerous all through the pine woods, where it finds every convenience for nesting in the multitude of perforated stubs. After the young were on the wing, the birds left the pine woods and resorted to the tops of the ridges and the open valleys where, high in mid-air, they were seen busily hunting for insects. September 8 they were still to be noticed, though the majority had departed some time before. A few days later and the last had disappeared.

24. *Pyrranga ludoviciana*. LOUISIANA TANAGER. — Not common; a few breed. Apparently the bulk of the species spend the summer farther north, as in Colorado, and northwards it is numerous.

25. *Carpodacus cassinii*. CASSIN'S PURPLE FINCH. — Not common; but few apparently pass the summer here, and we saw but few in the fall.

26. *Loxia curvirostra americana*. RED CROSSBILL. — I saw but one Crossbill, October 20. As I failed to secure it, its identity cannot be fully established. It was, however, presumably not the var. *mexicana*, but the Common Crossbill, which in 1873 I found to breed in the mountains near Fort Garland, in Southern Colorado.

27. *Chrysomitris pinus*. PINE FINCH. — Abundant in early fall, and doubtless breeding, though not detected by us in summer.

28. *Centrophanes ornatus*. CHESTNUT-COLLARED LONGSPUR. — A single specimen was shot by Mr. Nelson, September 12. This individual was probably the one seen by me a few days previously. The occurrence of this plain-inhabiting species, in a narrow valley in the midst of the pine woods, was of course accidental.

29. *Centronyx bairdi*. BAIRD'S SPARROW. — Two specimens of this Sparrow were secured. Both were in extremely worn plumage, and in this respect were similar to the many specimens secured by me in Arizona in 1873. I then interpreted this condition to indicate that they had passed the summer not far away, believing that they could not have migrated any distance in such dress. The two specimens secured here throw little additional light on the matter, since they may have straggled up the Pecos from their breeding grounds in the open grassy plains below, or they may have dropped in as migrants from the far north, from Montana or Dakota. The latter supposition is perhaps the more probable. It is well-known that the species migrates to the north along the foothills of Colorado in spring, and there is no recorded evidence that it breeds either in Colorado or elsewhere south of the Union Pacific Railroad. Still I am not aware that any of our Sparrows migrate south in the excessively worn condition that attends nesting. They usually spend some time in recuperating, and the moult is usually well along before they migrate. Collectors in the region, south of the known summer habitat of this Sparrow, will do well to keep a sharp lookout for it.

(To be concluded.)

INTERESTING RECORDS FROM TORONTO,
CANADA.

BY ERNEST E. T. SETON.

As a result of the examination of numerous small collections in the city of Toronto I am able to make the following more or less extra-limital records. In every case I have examined the bird myself, and though in most instances debarred by sealed cases from taking measurements, etc., I am satisfied that the identifications are correct. Several occurrences of doubtful authenticity are omitted. Some of those given are specially interesting from their showing the tendency of many species to push farther and farther to the north. The nomenclature is that of Coues's 'Key,' first edition.

I take this opportunity of thanking the gentlemen named below for their courtesy in placing their specimens at my service.

BLUE-GRAY GNATCATCHER. *Polioptila cœrulea*.—A male in full song was taken by myself at Toronto, May 9, 1885.

EVENING GROSBEAK. *Hesperiphona vespertina*.—The Rev. John Doel, of Toronto, showed me a fine female specimen of this rare bird, taken at Toronto on Christmas day, 1854. Mr. Doel observed a flock of five or six feeding on the berries of the mountain ash, on Yonge Street. Two of these he secured, but one was too much mangled to be kept.

About Christmas, 1870, he observed another small flock but failed to secure any.

LAPLAND LONGSPUR. *Plectrophanes lapponicus*.—Individuals of this species have occurred in company with *P. nivalis* almost every winter as far back as the records here extend.

YELLOW-HEADED BLACKBIRD. *Xanthocephalus icterocephalus*.—This species has been taken a number of times, in company with the Red-winged Blackbird, by Mr. Wm. Loane, who describes it as the Californian Blackbird. The specimen I examined was taken by that gentleman; it is now in the possession of Mr. Jacobs of Centre Street, Toronto.

COMMON CROW. *Corvus americanus*.—Three albinos of this species were observed in the country east of Toronto, about three years ago. One of these was secured and is now in the

possession of Mr. C. A. Hirschfelder. It is pure white. No data.

CANADA JAY. *Perisoreus canadensis*.—In the winter of 1836 and the spring of 1837, according to Mr. Doel, this bird appeared about Toronto in great numbers. It was previously unknown in the district, and has not since been observed.

YELLOW-BILLED CUCKOO. *Coccyzus americanus*.—I have examined several specimens taken in the vicinity of Toronto. It appears to be a rare but regular summer resident.

RED-BELLIED WOODPECKER. *Centurus carolinensis*.—A female was taken at Toronto, May 19, 1885.

***Colaptes auratus* (hybrid with *C. mexicanus*).**—This remarkable specimen was shot by Mr. Burton, just outside the City of Toronto, in September, 1883. The following is its description.

Sex? Length, 34 cm.; wing, 16.5; tail, 11.5; bill, 3.5; tarsus, 3; middle toe and claw, 3. Color: Above as in the male *auratus*, but darker and more pronounced. The purplish-gray of the throat is very rich and has a glaucous gloss. Pectoral crescent and black maxillary mark very large. Spots on the breast large and unusually numerous. Breast and sides tinged with yellow. First four primaries with shafts and under side red; the next two shade into yellow in the terminal third. The last two secondaries are as in *mexicanus*. The rest of the quills as in *auratus*. The under coverts are pink. The tail-feathers are as in *mexicanus*, but towards the middle are more and more tinged with yellow. Otherwise this specimen resembles a large male *auratus* in very high plumage.

I have nothing but descriptions and my memory for making comparisons with *mexicanus*, and suspect that the red on the quills is not quite so deep as in the typical bird. Yet this need not invalidate the description of the specimen, which is evidently a fine hybrid, and chiefly remarkable for having been taken at Toronto. This specimen is in the possession of Mr. Cross, taxidermist.

? **SNOWY PLOVER. *Ægialitis cantiana*.**—A specimen of this bird was shot here by Mr. J. Forman, May, 1880, and is now in the rooms of the Toronto Gun Club. It was at the time in company with some Piping Plovers (*Æ. meloda*). This specimen (sex?) answers in general, to the description in Coues's 'Key' and fully in regard to the bill; it differs in being much lighter in plumage. It is as follows: Pure white, with crown and back slightly tinged with gray, and showing dusky touches; the black

bar on the crown is strongly marked. No bar on the breast, but there is a dark patch just before each wing-band, fading away towards the back; a dusky patch on each ear; primaries dusky; the three central pairs of tail-feathers are touched with dusky near the tip. I had no opportunity to make measurements, but in the same case were *meloda* and *semipalmata*, and comparison with these makes me almost certain that it is *cantiana*. The bill is noticeably long, black, and slender. I never met the bird before, and have no material to aid me in settling the point.

AMERICAN SNIPE. *Gallinago wilsoni*.—A *white* specimen of this well-known bird was shot in Toronto marsh on the 3d of May, 1884, by Mr. H. Townson, in whose possession the bird now is. It was killed in company with two normal individuals of the same species. It is pure white, with the ordinary markings indicated in pale, creamy buff, the only dark shades being a few dusky touches on the scapulars, flanks, and subterminal tail-band. The legs and bill are yellowish flesh-color.

RUFF. *Philomachus pugnax*.—A specimen of this rare straggler was shot on Toronto Island in the spring of 1882. It is now in the possession of Mr. Young of Toronto. The bird was mounted in a sealed case, so that accurate measurements could not be made, but the general proportions and the large ruff were unmistakable. This specimen appears to agree with the maximum dimensions given in Coues's 'Key.' The ruff is not fully developed, and the face is still feathered. The color is as follows: Head, nape, hind-neck, and upper part of ruff gray with black pencillings; wing-coverts and scapulars black with light edges; chin, belly, crissum, and tail-coverts white; quills dusky; tail-feathers gray with black bars; throat, breast, and most of ruff glossy, greenish black.

GREAT WHITE EGRET. *Ardea egretta*.—A magnificent specimen of this beautiful Heron was shot at Lake Nipissing in 1883. It is now in the museum of Mr. C. A. Hirschfelder.

HYBRID MALLARD AND DUSKY DUCK (?).—In the rooms of the Gun Club there is also a supposed hybrid between these two species. Certainly it answers the description of no Duck ever found in this region, while it combines, in a remarkable degree, the characters of the two mentioned. It is known to the sportsmen here as a 'Brewer.' It was shot in this locality. No data.

BARROW'S GOLDENEYE. *Bucephala islandica*.—A fine male specimen of this Duck was killed here by Mr. Charles Pickering.

on the 18th of April, 1885. This I examined in the flesh. It is the only one ever taken in this locality.

BUFFLEHEAD DUCK. *Bucephala albeola*.—An albino of this species was killed about thirty miles east of here, and is now to be seen in the possession of Mr. Jos. Taylor of Toronto.

HARLEQUIN DUCK. *Histrionicus torquatus*.—A female of this species is now in the rooms of the Toronto Gun Club. It was killed here in the fall of 1881, by Mr. Wm. Loane, who claims also to have taken a pair in the spring of 1861.

GLAUCUS GULL. *Larus glaucus*.—A fine specimen of this Gull was killed in Toronto Bay in the spring of 1884, by Mr. George Guest of this city.

ANALECTA ORNITHOLOGICA.

Sixth Series.

BY LEONHARD STEJNEGER.

XXIX. *Jacana* CONTRA *Parra*.

Linnæus, basing his diagnosis upon Edward's pl. 48, in the 10th edition (1758), p. 152, described a *Fulica spinosa* as "F. fronte carunculata, corpore variegato, humeris spinosis, digitis simplicibus, ungue postico longissimo. Habitat in America australi." Description and plate apply with equal pertinency to the young Brazilian *Jaçana*, commonly called *Parra jacana* Linn. The latter name, as we shall see presently, dates from 1766, and *spinosa* will, therefore, have to stand, as already indicated by Ridgway (Water Birds, I, p. 175).

As will be remarked, Linnæus included the *Jaçana* in 1758 in the genus *Fulica*. Brisson, with his usual excellent judgment of generic distinctions, made in 1760 a separate genus for this bird, describing the different plumages as different species, however. This genus, which he called *Jacana*, he characterized by the extremely lengthened claws, thereby excluding all the *Charadriidæ* with frontal lobes and wing-spurs, referring them to his

genus *Vanellus*, thus proving that he understood their true relationship.

Thus was first established the genus which has since nearly unanimously but wrongly been called *Parra*. Its proper name is *Jacana*, and its only type is *Jacana spinosa*.

Parra was not invented before 1776, when Linnæus — fully aware of Brisson's older appellation, for he quotes the latter — introduced as a genus a most heterogeneous assemblage, the chief characters of which were "Frons carunculata; carunculis lobatis; Alulæ spinosæ," ignoring not only Brisson's appellation but also his natural arrangement. *Parra*, therefore, includes not only the *Jaçana*, which Linnæus described twice, as *Parra jacana*, and as *Parra variabilis* (the latter being only a new name for *Fulica spinosa*), but also two of Brisson's *Vanelli*, which now are usually referred to *Chettusia* or *Lobivanellus*, and finally the bird which is so well known as *Chauna chavaria*.

Starting our nomenclature from 1758, it is clear that *Parra* for the Brazilian *Jaçana* is entirely out of question. Consequently the name of the family also should be changed, and will stand as *Jacanidæ*.

But even if we take 1766 for our starting-point, the result will be the same, viz., that *Parra* is untenable for the *Jaçanas*. *Parra*, as originally established, contained five nominal species, *P. dominica* and *senegalla*, which are Old World Charadriidæ, *P. jacana* and *variabilis*, which are the Brazilian *Jaçana*, and *P. chavaria*. Now, in 1774, Brisson's faithful follower, Jacob Schäffer, in his 'Elementa Ornithologica,' re-established the genus *Jacana*. He placed it next to *Vanellus* and gives the comparative characters as follows:

"Rostrum rectum; apice crassius, breve. VNGVICVLI brevis simi. Vanellus."

"Rostrum rectum; apice crassius, longiusculum. VNGVICVLI longissimi. Jacana."

referring at the same time to pl. vii, figs. i and ii, where is given colored representations of head and foot of *Jaçana*, probably copied from Edwards, pl. 48, and very recognizable. Not before 1811 was *Chauna* established by Illiger, leaving *Parra* for the two 'Vanelli' of Brisson.

1758-men may therefore tabulate the synonymy thus:

Jacana BRISS.

- < 1758. — *Fulica* LINN., Syst. Nat. 10 ed., I, p. 152.
 = 1760. — *Jacana* BRISS., Ornith., V, p. 121.
 < 1766. — *Parra* LINN., Syst. Nat., 12 ed., I, p. 259.

1766-men will have to register the synonyms as follows:

Jacana SCHFFÄER.

- < 1766. — *Parra* LINN., Syst. Nat., 12 ed., I, p. 259.
 = 1774. — *Jacana* SCHÄFFER, Elem. Orn., fol. B, 2, pl. vii, figs. i, ii.

The name *Parra* should, therefore, be restricted to the genus having for type *P. dominica* or *P. senegalla*, consequently the genus *Lobivanellus* Strickland, 1841, or more strictly to the group designated by Gray in his Hand-list (III, p. 11) as "*d*—?" Here I may further remark that *Lobivanellus* Strickl. really belongs to this latter group, being consequently a strict synonym of *Parra*, while Gray's group *c* should stand as *Sarcogrammus* Reichb., thus:

Sarcogrammus REICHB.

- > 1852. — *Sarcogrammus* REICHENBACH, Syst. Av., p. xviii (*Sarcogramma* in Jerdon, B. Ind. III, p. 648).
 > 1864. — "*Vanello-chetusia* BRANDT" Jerdon, B. India, III, p. 646 (nec BRANDT).
 > 1871. — *Lobivanellus* GRAY, Handl. III, p. 11 (nec Strickl. as restricted).

Parra LINN.

- > 1766. — *Parra* LINN., Syst. Nat., 12 ed., I, p. 259.
 > 1841. — *Lobivanellus* STRICKLAND, P. Z. S., 1841, p. 33 (as restricted by Reichenbach, 1852).

In regard to the synonym "*Vanello-chetusia* Jerdon, nec Brandt," I may remark that I agree completely with Bonaparte in referring *S. inornatus* (and *cincereus*) to the same genus as *S. indicus* (= *goënsis*), as I can detect no structural difference of any consequence.

Gray has noted the facts concerning *Jacana* and *Parra* as specified above, calling the Jacanas: "*Parra* Lath. 1790, nec Linn. 1766"! But he made a strange mistake in placing "*Parra* L., 1766." as a synonym of *Sarcogrammus* Reichb.

XXX. *Colymbus nigricollis*, NOT A NORTH AMERICAN BIRD.

Colymbus nigricollis (Brehm) proper — that is to say, the Palæarctic form — has crept into the lists of North American birds by a mistake, caused by the uncertainty as to which form authors meant by the name "*Podiceps auritus*."

"*Podiceps auritus*" was first introduced into the North American fauna by Audubon — Orn. Biogr. V, 1839, (p. 108, pl. 404); Syn., 1839, (p. 358); B. Am., VII, 1844, p. 322, pl. 482 — who described and figured specimens lent him by his "noble and kind friend the Right Honorable the Earl of DERBY, who received them from North America, where, as I am assured, it is not uncommon, although it has not been my good fortune to meet with it." This is the black-necked or 'eared' species; but, judging from the plate and the description ("the wings greyish-brown with a broad patch of white, the secondary quills being of that color"), in all probability the American race, *P. californicus* Heerm., as already indicated by Dr. Coues, who puts the references to Audubon in the synonymy of the latter form (B. Northwest, p. 733).

Mr. Lawrence, in Baird's 'Birds of North America' (1858, pp. 896, 897), enumerates both *californicus* and *auritus* as American, the latter solely on Audubon's authority, and copying his description. Hence the two names appear again in the Smithsonian 'Catalogue,' first octavo edition, 1859, as Nos. 707 and 708. It should be remarked, however, that at that time the relation of the 'California Grebe' to the black-necked or 'eared' species was not suspected, as only winter specimens were known. It was therefore compared with *P. cornutus*, the 'horned' Grebe, and not with the 'eared' one.

More recently *C. nigricollis* has been regarded as North American on account of the supposed occurrence of this form in Greenland. Professor Newton has been quoted as the authority, reference being made to his 'Notes on Birds which have been found in Greenland' (Arctic Manual, 1875, p. 110). Here is what he says:

"(51.) *Podiceps auritus*. Horned Grebe.

"A few immature specimens have been obtained in the southern part of Greenland."

This statement, however, is based solely upon Professor Reinhardt's 'List of the Birds hitherto observed in Greenland' (Ibis, 1861, p. 15), where it is formulated thus:

"87.* *Podiceps cornutus* (Gmel.).

"Only a few young birds, obtained in the southern part of Greenland."

It is evident from the above that it is the more northern species, "*C. auritus*, the Horned Grebe," that has been occasionally obtained in Greenland, and not the black-necked southern species. The mistake evidently arose from the belief that Newton's '*auritus*' was the same as the '*auritus*' of nearly all American authors up to Ridgway's 'Nomenclature' (1880), and still of Dr. Coues's publications ('Check-list,' 1882, and 'Key,' 1884).

Colymbus nigricollis (*auritus* Auct. nec Linn., nec Newton, nec Ridgw.) is a bird of rather southern distribution. In Europe it breeds only in the central parts, being a straggler to the Scandinavian peninsula and Finland; it is common in Central and Southern Russia, and eastward through the southern parts of temperate Asia as far east as Japan. Its alleged occurrence in Greenland, therefore, aroused my suspicion, and the investigation resulted as above in the expulsion of the typical *C. nigricollis* from the list of North American birds.

XXXI. "*Simorhynchus* MERREM, 1819."

I quote the following from my 'Ornithological Explorations in Kamtschatka and the Commander Islands,' p. 38:

"Merrem is said to have established the genus *Simorhynchus* (nec KEYS. and BLAS., 1840, *qui Terekia* BP.) upon *A. cristatella* PALL. As early as 1868 Dr. Coues asked, 'Where is this genus named?' but nobody seems to have been able to give an answer. Nor do I know whether Merrem included more species than *cristatella* in his apocryphal genus. Anybody having the opportunity of investigating the matter would gain the lasting thanks of ornithologists by publishing the results—preferably a full extract of Merrem's paper as far as it relates to the present question—in any of the standard ornithological periodicals."

*"Those observed as yet in very few instances only, and the accidental stragglers, are marked with an asterisk" (*l. c.* p. 4).

Now that I am in the position to elucidate the matter myself, I ought, perhaps, modestly to give up my claims to "the lasting thanks of ornithologists," but in view of the fact that I have mostly earned anything but thanks for my 'discoveries' in old names, I can hardly afford to part with my right to score this last one to my credit.

In the article *Alca* of Ersch and Gruber's Encyclopædia * Merrem urges the necessity of subdividing Linnæus's genus *Alca*, proposing the following genera: 1, *Alca*; 2, *Mormon*; 3, *Simorhynchus*; 4, *Arctica*.

In response to my own request above I shall give a full extract of the article (pp. 405, 406) so far as it relates to the name in question:

"3. Starike. *Simorhynchus*. Die Stariken, denen wir im Teutschen ihren Russischen Namen lieszen, gesellte Pallas, durch den allein wir die erste genauere Kenntniz haben den Alken bei, obgleich er [page 406] selbst die Unähnlichkeit anerkannte, und sie sich auch von den beiden vorhergehenden Gattungen auffallend unterscheiden. Ihr Schnabel steigt nämlich vorn aufwärts, so dasz seine Spitze höher liegt, wie der Mundwinkel, er ist jederzeit glatt und ohne Wachshaut. Ihre Mundöffnung ist klein. Ihre Nasenlöcher liegen von der Stirn entfernt, von einer Erhöhung der Kant eingefasst, welche gewissermaszen Nasenlöcherflügel bildet. Ihre Flügel bestehen aus 10 Schwungfedern der ersten und 16 der zweiten Ordnung. Die zweite ist die längste. Ihre Füße sind wie bei den vorigen und ihr kurzer Schwanz besteht aus 14 Ruderfedern. Man findet sie allein im Meere zwischen Asien und Amerika, und sie legen ein einziges Ei auf die kahlen Felsen."

Merrem includes two species in the genus thus defined, viz., on page 406, *Simorhynchus cristatus*, based upon Pallas's *Alca cristatella*, and on page 407, *Simorhynchus Psittacula*, based upon the same author's *Alca psittacula*.

It will be a relief to quote, in the future, "*Simorhynchus* MERREM in Ersch & Gruber's Encycl., 1 sect., II, 1819, p. 405 (type *Alca cristatella* PALL.)" instead of "*Symorhynchus* 'MERREM 1819' fide G. R. GRAY, type, *Alca cristatella* PALL., fide GRAY."

* Allgemeine Encyclopädie der Wissenschaften und Künste in alphabetischer Folge | von | genannten Schriftstellern bearbeitet | und herausgegeben von | J. S. Ersch und J. G. Gruber | Professoren zu Halle. | Zweiter Theil | mit Kupfern und Char- ten | — | Alga-Aldus | — | Leipzig, in Verlage von Johann Friedrich Gleditsch 1819.

XXXII. *Dendroica vigorsii* (AUD.).

The rule "once a synonym, always a synonym" necessitates the rejection of the specific name '*pinus*' for the Pine Warbler, as will be seen from the following account.

Linnaeus (S. N. 12 ed. I, p. 187), in 1766, described correctly the Blue-winged Yellow Warbler as *Certhia pinus* basing it upon Edwards's plate 277, upper figure. Mislead by the latter author he quotes as a synonym Catesby's plate 61, which is a poor representation of the Pine Warbler. Latham, in 1790, referred the bird described by Linnaeus to the genus *Sylvia* calling it *Sylvia pinus*, a name which was adopted by Vieillot, 1807, in his Birds of North America.

Wilson, in 1811 (Am. Orn. III (p. 25)), demonstrated that the birds figured by Edwards and by Catesby are different species. Well aware of the term *Sylvia pinus*, he did not intend it as a new name, but he simply restricted it to Catesby's bird. In this he was wrong, as we have seen above. He should have left the name *Sylvia pinus* with the Blue-winged Yellow Warbler and given a new name to the Pine Creeper, but, instead, he bestowed the new name upon the former, calling it *Sylvia solitaria*. It should also be noted that the two birds were both included by him and subsequent writers in the genus *Sylvia*.

It is evident that *Sylvia pinus* Wilson 1811, nec Latham 1790, cannot stand under any circumstance. Another name being necessary we will have to take the one bestowed by Audubon, in 1832, viz., *Sylvia vigorsii*. The species should in the future be known as

Dendroica vigorsii (AUD.).

SMITHSONIAN INSTITUTION.

Washington D. C., August, 1885.

DESCRIPTION OF A NEW CARDINAL GROSBEEK
FROM ARIZONA.

BY ROBERT RIDGWAY.

THE Cardinal Grosbeak from Arizona, hitherto supposed to be identical with *C. igneus* from Cape St. Lucas, proves, on comparison of numerous specimens, to be easily distinguishable.

I therefore propose for it the name *Cardinalis cardinalis superbus*, with the following characters:—

***Cardinalis cardinalis superbus*, subsp. nov.**

SUBSP. CHAR.—Similar to *C. cardinalis igneus*, but decidedly larger, and the female more richly colored.

Adult ♂ in breeding season (No. 98,942, U. S. Nat. Mus., Fuller's Ranch, Arizona, May 30, 1884; E. W. Nelson): Head, neck, and entire lower parts, including lining of wing, pure, rich, scarlet-vermilion, becoming gradually but slightly paler posteriorly. Nape, back, scapulars, rump, upper tail-coverts, wing, and tail, much duller, more brownish, red, the dorsal region tinged or mixed with light grayish brown: terminal portion of primaries clear grayish brown. Chin, upper part of throat, anterior part of malar region, lores, and narrow line from latter to base of culmen, black. Bill deep orange-red (bright vermilion in life); legs and feet horn-brown. Wing, 4.15; tail, 5.00; culmen, .85; bill from nostril, .60, depth at base, .70; tarsus, 1.10; middle toe, .72.

Adult ♂ in winter (No. 61,541, U. S. Nat. Mus., Colorado River, Arizona, Nov. 30, 1871; F. Bischoff): Similar to summer plumage, but all the feathers of the nape, back, scapulars, rump, and the upper tail-coverts conspicuously bordered terminally with brownish gray, and those of the lower parts similarly, but much more narrowly and indistinctly, bordered with brownish white. Wing, 4.15; tail, 5.10; culmen, .90; bill from nostril, .60; depth at base, .70; tarsus, 1.08; middle toe, .75.

Adult ♀ (No. 98,944, Tucson, Arizona, Jan. 30, 1884): Head (except capistrum and crest), sides of neck, and lower parts in general, deep tawny buff, the top and sides of the head, and middle of jugulum, much tinged with dull vermilion; crest dull vermilion, the feathers tipped with light brown, or deep grayish buff. Capistrum dull gray, becoming nearly white on chin and upper throat. Lining of wing, including inner edges of remiges, pure light vermilion; tibiae, crissum, and lower tail-coverts strongly tinged with vermilion. Nape, back, scapulars, rump, and upper tail-coverts uniform grayish broccoli-brown, lighter and more buffy on the nape, all the feathers tinged with dull red beneath the surface. Wings and tail dull brownish red, the greater coverts and tertials broadly edged with the color of the back, the tips of primaries light grayish brown, and rectrices narrowly edged with the same. Bill, orange-red (bright vermilion in life); legs and feet horn-brown. Wing, 3.80; tail, 4.70; culmen, .80; bill from nostril, .52, depth at base, .65; tarsus, 1.00; middle toe, .65.

Another adult female (No. 98,945, Lowell, Arizona, April 2, 1884, E. W. Nelson), has still more red than that described above, the entire top and sides of the head being strongly tinged with this color, as are also the lower throat, jugulum, breast, belly, and lower tail-coverts. The ochraceous-buff of the lower parts is paler, the feathers being somewhat worn and faded.

An adult female in Mr. Henshaw's collection (No. 911, Coll. H. W. H., Gila Co., Arizona, Nov. 18, 1881), differs from either of the National Mu-

seum examples in having but a trace of red on the side of the head, and much less of the same on the jugulum.

The adult males of the two forms which I have been able to examine measure as follows:—

C. igneus.

Museum and No.	Collector.	Sex and age	Locality.	Date.	Wing.	Tail.	Culm'n.	Bill from nostril.	Tarsus.	Middle toe.	Depth of bill at base.
17087, U. S.	Xantus.	♂ ad.	Lower Cal. (Cape St. Lucas).	.....	3.65	4.40	.85	.55	1.02	.65	.67
12994, "	"	♂ "	"	.....	3.70	4.50	.82	.55	1.02	.65	.65
26510, "	"	♂ "	"	.....	3.70	3.50	.80	.51	1.00	.65	.65
26514, "	"	♂ "	"	.....	3.75	4.40	.82	.52	1.02	.65	.62
29538, "	"	♂ "	"	.....	3.70	4.50	.75	.55	1.02	.68	.68
29631, "	Belding.	♂ "	(La. Paz).	Dec. 21.	3.80	4.60	.80	.55	1.05	.65	.65
29638, "	"	♂ "	"	.....	3.75	4.50	.78	.45	1.00	.62	.65
27551, "	"	♂ "	(San Jose).	April 11.	3.95	4.30	.75	.52	1.00	.65	.67
27554, "	"	♂ "	"	" 12	3.95	4.50	.78	.52	1.05	.65	.65
27552, "	"	♂ "	"	" 23	3.70	4.40	.82	.55	0.95	.68	.65
27553, "	"	♂ "	"	" 13	3.60	4.40	.75	.48	1.01	.64	.66
965, H. W. H.	"	"	"	Average,	3.70	4.45	.79	.51			

C. superbus.

Museum and No.	Collector.	Sex and age	Locality.	Date.	Wing.	Tail.	Culm'n.	Bill from nostril.	Tarsus.	Middle toe.	Depth of bill at base.
49756, U. S.	Palmer.	♂ ad.	Arizona (Camp Grant).	Feb. 20.	4.00	5.00	.85	.55	1.10	.72	.70
49757, "	"	♂ "	"	" 10.	4.00	4.90	.85	.55	1.10	.72	.68
61544, "	Bischoff.	♂ "	(Colorado River).	Nov. 30.	4.15	5.10	.90	.60	1.08	.75	.70
98944, "	Nelson.	♂ "	(Fuller's).	May 30.	4.15	5.00	.85	.60	1.10	.72	.70
98943, "	"	♂ "	(Lowell).	April 2.	4.00	4.66*	.85	.55	1.12	.72	.68
99694, "	"	♂ "	(Crittenden).	July 15.	4.10	5.10	.87	.55	1.10	.70	.65
916, H. W. H.	"	♂ "	(Gila Co.).	Nov. 18.	4.95	5.10	.85	.57	1.07	.75	.65
			Average,		4.11	4.97	.86	.57	1.09	.73	.67

* Plumage very much worn.

ADDITIONAL NOTES ON THE NEST AND
EGGS OF SWAINSON'S WARBLER
(*HELINAIA SWAINSONI*).

BY WILLIAM BREWSTER.

SHORTLY after the publication of my first article on this subject* Mr. Wayne sent me two more nests of Swainson's Warbler, taken respectively June 27 and June 30, 1885. The first was built in a cane over a pool of stagnant water, at a height of about five feet; the second, also in a cane, was at a height of at least eight feet, and over clear, running water. The females of both nests were shot, thus rendering identification absolute.

The second nest was "found when the birds had just begun work, and I watched them repeatedly at their labors. They would fly up from the ground and, hovering like a Hawk or Kingfisher, fix the leaves in place with their bills. The female laid her first egg June 26, and one on each of the following two days. I took the nest on the fifth day, when dissection of the female showed that the set was complete."

The nest taken June 27 contained two eggs, chipped and on the point of hatching. Unfortunately both were broken in blowing, but Mr. Wayne describes them as "dead white without spots." He sends me the shells of one, which are quite immaculate.

The set of three eggs just mentioned is also before me. The specimens are in perfect condition and measure, respectively, $.75 \times .58$, $.77 \times .58$, and $.74 \times .58$. They are all oval, with the smaller end decidedly blunt and rounded, and in general shape closely resemble the smaller egg of the set described in 'Forest and Stream.' Their ground-color is also similar — dull white, with a faint but appreciable bluish tinge. One is perfectly plain; another, like the larger egg of the first set, has two or three minute specks which may be genuine shell markings; while the third is unmistakably spotted and blotched with pale lilac. Over most of the surface these markings are fine, faint, and sparsely distributed, but about the larger end they become coarser, thicker, and deeper-colored, forming a well-defined ring

* Forest and Stream, Vol. XXIV, No. 24, July 9, 1885, p. 468.

or wreath. All three eggs have a slight polish, and the shells look hard and thick for those of a Warbler's eggs.

The nests are similar in general position and construction to the specimen described by me in 'Forest and Stream,' but both differ in certain important details. The one containing the set of three eggs is composed almost entirely of bleached, straw-colored cane leaves, with an interior lining of pine needles and a few thread-like strands of black moss, apparently *Tillandsia*. This nest is much the smallest of the four, measuring externally 3.50 in diameter by 3.00 in depth; internally 1.50 in diameter by 1.50 in depth; the greatest thickness of the rim or outer wall being 1.00. Unlike the specimen first described, it is firmly supported on all sides by the fascicled branches among which it rests. Its shape is nearly globular, and although the exterior is rather loosely formed, the structure, as a whole, is neat and compact.

The nest taken June 27 is very much larger, in fact quite the largest specimen that I have seen, measuring externally 5.00 in diameter by 6.00 in depth; internally 1.50 in diameter by 1.25 in depth; with the rim in places 1.75 thick. It is shaped like an inverted cone, the apex extending down nearly to the point of junction of the numerous fascicled stems which surround and support its sides. In total bulk it fully equals the average nest of our Crow Blackbird, while it is not nearly as finished a specimen of bird architecture. Indeed it would be difficult to imagine anything ruder than its outer walls,—composed of mud-soaked leaves of the sweet gum, water oak, holly, and cane, thrown together into a loose mass, bristling with rough stems, and wholly devoid of symmetry or regularity of outline. The interior, however, lined with pine needles, moss fibre, black rootlets, and a little horse-hair, is not less smooth and rounded than in the other specimens.

The acquisition of these additional nests is important as tending to show that the position and construction of the first two nests, and the character of the eggs which one of them contained, were not exceptional. The total results of Mr. Wayne's labors may be summed as follows: Four nests, taken respectively June 5, 6, 27, and 30. contained, respectively, one young bird a few days old, one young bird and two addled eggs, two eggs on the point of hatching, and three perfectly fresh eggs. All four nests were essentially similar, being bulky and loosely-formed, composed

mainly of dry leaves, lined with fine roots, moss fibres, pine needles, and horse-hair, and placed in canes over water at heights varying from four to eight feet. Of the seven eggs taken, four were immaculate, two perhaps slightly spotted, and one unmistakably spotted and blotched with lilac.

The inferences suggested by these facts are: (1) That Swainson's Warbler nests usually, if not invariably, in canes over water; (2) that it lays from one to three eggs; (3) that its eggs may be either plain, slightly speckled, or rather thickly and distinctly marked.

Another season's work on the part of Mr. Wayne will doubtless throw more light on all these points. Meanwhile ornithologists may well rest satisfied with the knowledge thus far obtained.

EARLY SPRING NOTES FROM THE MOUNTAINS OF SOUTHERN ARIZONA.

BY W. E. D. SCOTT.

THE present article, based on observations made and material collected in the pine region and neighborhood of Las Sierras de Santa Catalina, Pima County, Arizona, is in reality a continuation of an article which appeared in 'The Auk' for April, 1885 (pp. 172-174). The locality visited is the one there described. The duration of my stay was from April 19 to 24, inclusive.

The winter snow had almost melted from the ground and was only to be seen in patches in the deeper part of the woods and on the sides of hills and ravines, where the sun shone but little. It was still cold, and ice formed at night on water standing in pails, and on the edges of the mountain brooks where the current was not too swift. Except on the morning of the 21st of April, and throughout the entire day on the 24th of the month, the wind blew incessantly and most of the time with great force. On the 20th, about daylight, a cold storm of rain and hail set in, and later this changed into snow, which soon covered the ground to the depth of nearly an inch. The storm, however, broke about noon,

and the sun coming out the wintry effect was speedily dispelled. The other days were cloudless.

The collection of birds made during my stay embraces a hundred and fifty-one skins, the catalogue numbers of the same running from Nos. 2174 to 2324, inclusive; this I mention, as it will be necessary to refer to certain birds obtained.* Birds on the whole were much more abundant than during the former visit, but certain species that were met with in November, 1884, I did not detect during the present trip; and the more noticeable among these are *Carpodacus cassini*, *Hesperiphona vespertina*, and *Sphyrapicus thyroideus*. Others, then comparatively common, were now apparently rare, as I only saw one Olive-headed Warbler (*Peucedramus olivaceus*). The species obtained are the following:

Turdus unalascae auduboni.—On April 22, on the very summit of the mountains, I observed a pair of Thrushes, apparently mated, and took the female (No. 2234), which, on dissection, proved to be about to lay, the egg-yolks being some of them nearly half developed. This was the only pair of Thrushes observed.†

Sialia mexicana.—A few pairs were noticed at a high altitude in the pine region; and being already apparently mated, they doubtless breed early in May.

Poliophtila cærulea.—A pair, taken on April 20, about fifteen hundred feet below the summit, where the pines almost cease, and where the evergreen and scrub oak are the principal trees. Here this species was common.

Lophophanes wollweberi.—Not uncommon in the oak belt, just reaching to the lower pine limit. It is in places abundant in the oak region, and in this range of mountains the first set of eggs is laid by the 20th of April.

Sitta carolinensis aculeata.—Rather common, but by no means so abundant as in the winter. A female (No. 2265), taken April 22, had laid a full complement of eggs and had evidently begun sitting.

* [These specimens have been kindly forwarded to me for examination, by Mr Scott, with the request that I should add such remarks respecting them as seemed called for.—J. A. ALLEN.]

† [This specimen is unusually light colored even for var. *auduboni*, it being the most 'bleached out' specimen I have seen.—J. A. A.]

Sitta pygmæa. — Common, but not associated in large flocks as in the winter. They were generally paired, and I rarely saw more than two pairs together. From the dissection of the females taken, and from the fact that throughout the day I frequently saw the birds going in and out of holes in the dry pine stubs, I conclude that in some cases the nesting sites had been selected, and that eggs would have been laid, in some cases, by May 1.

Certhia familiaris mexicana. — A single pair observed, and the male taken (No. 2270), on April 23. They were creeping about on a leafless ash tree, where the pines were rather scattering, and near the point where these trees terminate, well down on the northern slope of the mountains. I heard no song.*

Catherpes mexicanus conspersus.† — One pair was taken just at the lower limit of the pine region. They had a nest in the vicinity, but my search for it was unavailing. The female had laid all the eggs of this, the first clutch, and possibly had even then young, as the skin of the belly showed that incubation had been going on for some time. Though much has been said of the wonderfully beautiful song of this species I can not but allude to it. For more than a year, two months in winter excepted, this clear, delicious series of whistling notes has been

* [Mr. Ridgway, in his 'Critical Remarks on the Tree-Creepers (*Certhia*) of Europe and North America' (Proc. U. S. Nat. Mus., V, 1882, pp. 111-116), says (p. 116) that *Certhia mexicana* differs "conspicuously from all the others in the total absence of light tips to the primary coverts." In this character Mr. Scott's specimen agrees perfectly, there being no trace of white on the primary coverts. The lower parts are also grayish, and the other features of coloration and size agree with the characters given by Mr. Ridgway as distinctive of *mexicana* (wing, 2.60; tail, 2.65), whose habitat he gives as "Guatemala and Southern Mexico." Mr. Brewster has since, however, very positively identified Arizona specimens with var. *mexicana* (Bull. N. O. C., VII, p. 81 April, 1882).

In his remarks on this species Mr. Ridgway observes that *mexicana* "is by no means smaller" than the northern races of *Certhia*, "thus affording another of the very numerous 'exceptions' to the supposed law of smaller size to the southward of resident species." He adds in a footnote that he has, "in perhaps a majority of cases [he had recently tested] been unable to verify this supposed law of latitudinal variation in size. He then gives the measurements of "the three specimens" of *mexicana* which he had "been able to examine," the sex of which, however, is not indicated. The average falls considerably below the average for *males* of the northern races *rufa* and *montana*, as given on preceding pages of the same paper. Might it not be fairly asked whether the generalization here reached has sufficient basis, in view of the small number of specimens, and these unknown as to sex? — J. A. A.]

† [A series of five specimens of this species in Mr. Scott's collection differ much from average Colorado and California specimens, in the head and neck contrasting more strongly with the back, the ground-color being darker and at the same time more profusely spotted, giving a grayer general effect. — J. A. A.]

constantly ringing in the air all about the cañon where my home is, and frequently the musician comes on a long piazza in front of my house and, not at all afraid, perches on the rail and creeps on every rafter, stopping constantly to pour out such a flood of music that, familiar as it has become to me, I am always astonished at its wonderful power and liquid sweetness. During that portion of the year when we live with doors and windows open (and this is for fully nine months), the little brown friend with silvery throat is often in the rooms of the house, hopping about and searching every "nook and cranny" for insect life, and betimes singing as merrily as when on the faces of the perpendicular rocks in the cañons, which are ever the favorite hunting grounds he delights in. The female sings quite as much as the male. Of the nest in detail I shall have more to say at another time.

I heard a single bird singing one morning at a high altitude among the pines, which was the only note made of its occurrence well within this region.

***Troglodytes aedon marianæ*, subsp. nov.**

Much lighter colored and grayer throughout than either *T. aedon* or the so-called var. *parkmani*, particularly on the anterior half of the upper surface, which is in strong contrast with the rest of the dorsal surface. A striking feature is the hoary appearance of the dorsal aspect of the head, neck, and anterior part of the back, caused by conspicuous gray edgings to the feathers. The same hoariness also characterizes the wing-coverts. The subterminal black bars on the feathers of the back are also unusually distinct and heavy. In other respects similar to *T. aedon* and its varieties *parkmani* and *aztecus*. Types, No. 2284 (♂, April 23) and 2307 (♀, April 24), Coll. W. E. D. Scott. Named for my wife, Marian J. Scott.*

* [Eleven specimens of this interesting form, collected April 19-24, are very uniform in character, and are strikingly different from the usual form of House Wren found throughout the West, which, as is well known, is scarcely, or often not at all distinguishable from the Eastern bird, or *aedon* proper. While much paler throughout than any western House Wrens I have before seen they are strikingly distinguished by the decided hoariness of the anterior half of the dorsal surface. In size and proportions careful measurements fail to show any differences from ordinary *aedon*. The wing varies in length from 48 to 52 mm., and the tail from 42 to 49 mm. The tarsus varies from 16 to 19 mm., averaging 17 mm., the culmen from 11 to 13 mm., averaging 12 mm. The first primary varies in length from 16 to 23 mm., or from less to more than half the length of the second. This shows how little reliance is to be placed upon this character, which has been taken as a basis for separation of the eastern from the western House Wrens, even by so late a writer as Mr. Sharpe (Cat. Bds. Brit. Mus. VI

Very common in the pines, and a few were noticed in the oaks just without the pine limit. They were in all cases apparently mated and the males were in full song. From the dissection of females taken I should infer that they would lay eggs early in May. Each pair had chosen, even when I noticed them, a particular locality, generally about some fallen tree, or near some tangle of dead pine boughs, where they maintained their supremacy, driving away any chance Warbler or Snowbird that dared to intrude upon their particular domain. A series of eleven birds collected are referable to this variety.

Helminthophila virginiaë. The only notes of the occurrence of this bird are based on two taken during my stay — No. 2276, ♂, April 23 and No. 2293, ♀, April 24. Both were secured near the summit of the mountain.

Helminthophila celata lutescens. Not observed until April 24, when two males and a female were taken. No others were noticed.

Peucedramus olivaceus. A single male, noted on April 22, was the only one observed.

Dendroeca nigrescens. Rather uncommon in the pines, but more plentiful in the oaks on the lower borders of the pine region. A female, taken in company with a male, apparently her mate, is in no way appreciably different from the male in coloring, though the latter is in as fully adult plumage as any I have ever seen. The birds would breed here, I should think, early in May.

Dendroeca auduboni. Rare. Only two taken in the pines, both males, and no others seen. In this connection I may mention that at the point where I live, altitude about 4000 feet, and distant from the region I am treating of not more than ten miles, this species is referred to as follows in my note-book. "General arrival, March 30, 1885. Many males in full plumage, others moulting." And on my return from the pine region, the birds were very abundant all about my house and in the surrounding country.

Dendroeca graciaë. Rather rare. I secured seven individuals during my stay. (No. 2174, ♂, April 19; No. 2228, ♂,

1881, p. 251). A good series of either *aëdon* or *parkmani* will show an equal range of variation, as an examination has proved.

It may be added that Mr. Scott also sends one specimen (No. 1075, ♂, Oct. 8, 1884) that agrees strictly with the usual style of Western House Wren. — J. A. A.]

April, 22; No. 2229, ♂, April 22; No. 2274, ♂, April 23; No. 2275, ♂, April 23; and No. 2290, ♀, April 24). No. 2290, ♀, proved on dissection to have the eggs so far developed that I judge she would have laid at latest in two weeks.

This species seems to live well within the pine region, and to affect the pines and hemlocks alone. Its movements are slow, and much remind me of those of *Dendræca pinus*. I heard no song, though the peculiar Warbler *cheep* was very pronounced.

Cardellina rubrifrons. Though not observed during the first day, I obtained a male of this species in the oaks, far down on the northern side of the mountains and almost out of the pine region, on April 20. During the last two days of my stay I found the species very common, in small companies of from four to six individuals. They were very shy, and affected the thick pine trees, though now and then descending into the oaks among the pines. The males have a very clear whistling song, which is rather prolonged, and which betrays their presence, as they move about rather nervously in thick pines and hemlocks, where they would otherwise hardly attract attention. That the main part of the representatives were males, and that the arrival of females was not yet general, seems clear from the series before me, which consists of eleven of the former and one of the latter. The female (No. 2295, April 24) is in no way different in appearance from the highest colored males that I have, and there is very little individual variation apparent in the birds before me. I noticed nothing of the Redstart, or Flycatching Warbler, in their motions, but they reminded me of Titmice in their general movements. As far as observed they did not associate with other species of Warblers and small birds, except with *Setophaga picta*, as noted below.

Setophaga picta. Common in the higher regions of the oak belt and throughout the pine region. Mated and in some cases already nesting or about to lay. A series of ten were secured and many more seen. Found more plentifully near water. I can see no difference between the highest state of plumage in the sexes, but often the male, when carefully compared with the average female, presents an appreciably brighter coloring, which is not to be noticed, however, at the usual distance at which one sees them when alive. They are not nearly as shy as *Cardellina rubrifrons*, with which bird I noticed them in company twice.

***Pyranga ludoviciana*.** An adult male (No. 2313) was taken at a high altitude on April 24, and another male and a female, seen the same day in a similar locality, completes my record. I think these were the first spring arrivals of the species.

***Tachycineta thalassina*.** Not uncommon in small flocks at the very highest altitude and in the heaviest pine timber. They frequently alighted on the upper limbs of dead trees, and doubtless breed here in the deserted Woodpecker holes.

***Vireo gilvus swainsoni*.** A single male in full song was taken just within the pine limit on April 21, and another was heard in the same locality on April 25.

***Vireo huttoni stephensi*.** Took one in the scrub oaks just within the lower pine limit on April 21 (No. 2212, ♂), and a second on April 22 (No. 2233, ♂), in an oak at almost the upper limit of the evergreen oaks where the principal part of the forest is pine and about a thousand feet higher in altitude than the former representative. These were the only ones observed.

***Melospiza lincolni*.** One taken at the lower pine limit (No. 2227, ♂, April 21), was the only one observed.

***Peucaea ruficeps boucardi*.** Abundant just below the pine region, and not uncommon well within the pines, as far up at least as the limit of the evergreen oaks.

***Junco cinereus [palliatus]*.** Common, particularly at the higher altitudes in the depths of the pine forests. Generally mated. A number of the females taken had laid part of the eggs of the first clutch, and all the females dissected would have laid in a short time. The male has an exceedingly pleasant song, not unlike that of *Pipilo maculatus megalonyx*, which bird he also emulates, perching on some prominent dead twig or limb, often at a very considerable height, whence his notes are heard perhaps most frequently just after sunrise. This was the only species of *Junco* observed. There are, among the series of thirty-five birds of this species secured during my stay, eight that show so marked a variation in regard to the extent of the reddish coloring and its intensity, both of the interscapular region and of the wings that I shall briefly notice them. The others* not specially mentioned are very typical individuals.

* [These have been examined by Mr. Ridgway and found to represent his new subspecies *palliatus*, described (since the receipt of this paper from Mr. Scott) on a later page of this number of 'The Auk.' Those here described in detail by Mr. Scott are var. *dorsalis*, variously intergrading with *palliatus*.—J. A. A.]

No 2189, ♂, April 19. General tint of the reddish coloring very dull and almost restricted to the interscapular region. The amount of reddish on the greater secondary coverts is much less than in average specimens. Only the faintest traces of this color on the secondaries. Irides bright lemon yellow. Upper mandible, black. Lower mandible blackish at base and tips, and obscure yellowish between these points.

No. 2287, ♂, April 23. The red of the interscapular region is very bright, but on the secondaries scarcely perceptible, and distinct only on two of the greater secondary coverts on each wing. Irides and bill normal.

No. 2196, ♂, April 19. Very similar to the last, except that the general tint of the red is very dull. Irides bright orange yellow. Bill normal.

No. 2247, ♀, April 22. The red is restricted to the interscapular region, there being no traces of this coloring any where on the wings. Otherwise typical *cinereus* with bright lemon yellow irides, upper mandible black and lower mandible clear yellow.

No. 2188, ♀, April 19. The red of the interscapular region dull in general tone. The only traces of red on the wings is to be faintly seen on two of the greater secondary coverts on each wing. Irides bright orange yellow. Bill normal.

No. 2190, ♀, April 19. General tint of red of the interscapular region very bright. The faintest traces of the same color on some of the greater secondary coverts. Irides lemon yellow. Bill normal.

No. 2289, ♂, April 23. The red, which is brighter in tint, absolutely confined to the interscapular region, there being no trace of this color anywhere on the wings. Irides lemon yellow. Upper mandible black; lower mandible dull yellow throughout, obscured by a blackish tinge.

No. 2285, ♀, April 23. Reddish of interscapular region rather dull. No red on the wings anywhere. A few reddish feathers, of the same shade as those of the interscapular region, mixed with the slate-colored feathers of the crown. Irides bright lemon yellow. Bill normal.

In *Junco cinereus caniceps*, taken in the spring near my house, I have not unfrequently seen the crown very perceptibly mixed with feathers of the peculiar reddish of the interscapular region.

Pipilo maculatus megalonyx. Common, even at the highest altitude, and becoming abundant in the mixed scrub oak and scattered pines. The males were in full song and the birds apparently mated.

Icterus parisorum. Several times during my stay I heard and saw this species in the oaks on the lower border of the pine region, and they were abundant about one mile away in the oaks where the yuccas are plenty.

Cyanocitta stelleri macrolopha. Rather common and generally mated throughout the pine region.

Aphelocoma sordida arizonæ. Abundant up to the lower edge of the pines, in the evergreen oak region. Breeding generally.

Contopus pertinax. Common in the pines, and also found a little below in the adjoining oaks. All of the specimens procured were males, and I do not think the females had arrived. While the actions of the bird in a great measure resemble those of *Contopus borealis*, in general appearance it is much more like *Contopus virens*, and the song, which I heard continually during my stay, is even more musical in tone than that of its last-named smaller ally. I secured nine males during my stay and saw many others. This was the only Flycatcher observed in the pine region, though not more than three miles away, and at an altitude probably two thousand feet lower, several others (*Tyrannus vociferans* *T. verticalis*, and *Myiarchus cinerascens*) were very common.

Phalænoptilus nuttalli. Rather common throughout the pine region, and abundant in the evergreen oak belt. I heard the first birds of this year singing near my house on the evening of February 27, and in a few days the birds were very common.

Selasphorus rufus. Though I observed four or five Hummingbirds, all of which I should refer to this species, well within the pines, the only one in reality identified—a male in full plumage—was at the lower pine limit on April 24.

Picus villosus harrisi. Not common. Only a few noted and a single male taken. Generally seen in pairs.

Melanerpes formicivorus bairdi. Rather common, and apparently mated or mating.

Asyndesmus torquatus. But two observed in the pines, though the birds were noticed commonly in the oak region during the ascent and on the return.

Colaptes mexicanus. Rather uncommon in pairs. Males in full song.

Buteo borealis calurus. The only Hawk observed, and not common. Abundant at lower altitudes in the mesquite region, where it begins to breed early in March.

Cathartes aura. One taken at a high altitude, in the pines. The only one seen.

DESCRIPTIONS OF NEW SPECIES OF BIRDS OF
THE FAMILY COLUMBIDÆ.

BY GEORGE N. LAWRENCE.

1. *Zenaida rubripes*.

Female. The front is of a light brown tinged with vinaceous; the upper plumage is olivaceous-brown, with a dull reddish tinge, which is most observable on the back; the hind part and sides of the neck are grayish, the latter glossed with golden changing to light violet; the two central tail-feathers are olive brown; the outer web of the first lateral feather is pale rufous; the bases of the four outer ones are brownish-cinereous, with their ends largely pale rufous, the two colors separated by a black bar; the other tail-feathers are dark cinereous with a subterminal black bar, on the under side the color of the basal portion of the tail feathers is blackish cinereous; the primaries are dark umber-brown, the secondaries brownish-black, both narrowly edged with white; the tertials are the color of the back, and are marked with four conspicuous oval spots of black; the under wing-coverts are light bluish-ash, the flanks dark ashy-blue; behind the eye is a small spot of black, and another below the ears, sides of the head and the chin pale vinaceous, the latter lighter in color; the under plumage is of a reddish cinnamon color, rather dull on the throat and breast, but somewhat brighter on the abdomen and under tail-coverts; bill black; tarsi and toes carmine red.

The color of the feet in the dried specimen is quite bright; in the living bird it is doubtless much more so. The tail has fourteen rectrices.

Length, fresh, 9.50 inches; wing, 5.25; tail, 3.38; bill, .62; tarsus, .75

Habitat. The Island of Grenada, West Indies. Type in the National Museum, Washington.

REMARKS. — As it somewhat resembles the description of *Z. vinaceo-rufa* Ridg., I sent it to Mr. Ridgway requesting him to make a comparison with the type of that species; he writes that it differs from it "in shorter tail, with the feathers much broader and more rounded at the end; decidedly smaller bill, much less purplish crissum, and in having the tail-feathers much more gray, with the terminal portion of the lateral ones much paler and of a more uniform rufous."

Mr. J. G. Wells of Grenada in his manuscript list of the birds of that island, gives the name 'Trinidad Dove' to one of the species. For a year or more I have been urging him to procure a specimen that it might be identified. He wrote that his engagements would not admit of his going after it, as it was found

only in a distant part of the island. A few days since I was much pleased to receive a letter from him, together with a specimen of the desired Dove.

He wrote as follows: "It is with great pleasure I now forward to you by book post, a skin of the Dove known locally as the Trinidad Ground Dove. This bird was shot on the eastern side of the island and sent to me by a brother of mine, who knew I was anxious to procure a specimen of it; it is not a common bird. I have shot three or four of them on a small island off the south coast called 'Glover's Island,' where I believe they resort during the nesting period, and I have also shot one in Carriacou, but have never until this instance seen one taken on the island proper; the present specimen is a ♀, and I would have been very glad to get a ♂ also, as (writing from memory) I believe the ♂ to have a gray head; however, I shall use every endeavor to procure one."

2. *Zenaida bogotensis*.

Front and sides of the head vinaceous; under the ear a spot of black; vertex and occiput dull plumbeous; plumage above brownish-olive, reddish on the back; sides of the neck golden-violet; the two middle tail-feathers are dark olive-brown, the next pair are brownish-ash, the others are grayish-ash for two-thirds their length, ending with pale rufous, brightest on the three outer feathers; all have a subterminal band of black separating the two colors; the outer web of the first lateral feather is clear light rufous; the tail-feathers underneath have their bases blackish; the tail consists of fourteen rectrices; the lesser wing-coverts are reddish-brown, lighter in color than the back; the greater wing-coverts are grayish-brown, the primary and secondary quills are blackish-brown, narrowly edged with white, and have their shafts of a dark brownish-red; the tertiaries are reddish-brown, marked with three large oval spots of black; under wing-coverts and axillars plumbeous-white; chin whitish, upper part of throat pale vinaceous, lower part of throat and upper part of breast of a dull chocolate cinnamon color; the breast below this is pale cinnamon, the abdomen of the same color but brighter, and the under tail-coverts of a still deeper and brighter cinnamon; the flanks are ashy-blue; the bill is black; the feet, in the dried specimen, are yellowish.

Length, uncertain (the skin being made up very short); wing, 6.13; tail, 4.10; bill, .70; tarsus, .87.

Habitat. Bogota, New Grenada. Type in my collection.

REMARKS. — I have had this specimen for several years, supposing it to be *L. ruficauda* Bonap., but while investigating the West India species, I find it to be distinct. In this opinion

Mr. Ridway concurs, and says "it differs from *T. vinaceo-rufa* in much deeper general coloration, the very different color of the crissum (rufous instead of purplish vinaceous), and much larger size, especially the bill."

T. ruficauda seems to be a rare species, as there is no specimen in the National Museum or in that of the American Museum of Natural History, New York. It is described as being quite dark above ("brunneo-ardesiaca"), with the hind neck plumbeous; below and on the neck rosy wine color; a spot under the eye and a line behind the eye, violet-black, bordered with white; sides of the neck golden-violet; wing-coverts "ardesiakis"; quills blackish, tail short, outer tail-feathers "fusco-ardesiakis," with a black spot across the middle, the end broadly rufous.

NEW YORK, September 15, 1885.

HELMINTHOPHILA LEUCOBONCHIALIS.

BY ROBERT RIDGWAY.

WITHOUT having any new evidence to present concerning this perplexing bird in the way of additional specimens, I would like to offer for consideration a hypothesis which it seems to me affords a more plausible explanation of certain aspects of the case than that which suggests hybridism between simply *H. chrysoptera* and *H. pinus* as sufficient to account for the variable 'aberrant' series which has been referred to *H. leucobronchialis*, together with those which represent the so-called *H. lawrencei*.

It has been stated that *H. leucobronchialis* and *H. lawrencei* possess no important original characters. This is certainly true of the latter, which is very obviously a hybrid of the above-named species; but it is not true of the former, which in its pure white throat, in very striking contradistinction to the deep gray or black throat of one and bright yellow throat of the other alleged parent, certainly does possess one very important original character, which it is impossible to conceive can be derived from the crossing of the two species in question.

A supposed strong point which has been urged against the validity of *H. leucobronchialis* as a distinct species, is the circumstance that typical specimens constitute a small proportion of all those obtained, and the suspicious circumstance that each individual of the aberrant majority inclined, in one respect or another, toward *H. pinus*. Only seven of the twenty-two examples which have been recorded (including those of '*H. lawrencei*,' which must be considered in this connection), or not quite one-third, are true *H. leucobronchialis*; but when, instead of taking two elements into consideration (i. e., *H. pinus* and *H. chrysoptera*) we add a third (*H. leucobronchialis* itself), the proportion becomes far less significant.

In no other way than by assuming that *H. leucobronchialis* is a distinct species, which itself hybridizes with its allies, can we account for the origin of the puzzling series of specimens which have so prejudiced the claims of the bird under consideration to specific rank; and I feel convinced that Mr. Brewster expressed the exact truth when he stated (*cf.* Nuttall Bulletin, III, p. 99) that "the validity of this distinctly characterized species must now be regarded as established," and I feel equally satisfied that the hypothesis of hybridism which he subsequently advanced fails to settle the case as affecting *H. leucobronchialis* itself, however well it may answer for the 'aberrant' specimens which have been wrongly referred to it.

Regarding the very close resemblance between certain specimens of *H. leucobronchialis*, Mr. Brewster observes: "Indeed, it would be difficult to select three individuals of any species which vary so little *inter se*." I have myself seen only the type and the Virginia specimen in the National Museum collection; but I can affirm that the two are as nearly counterparts of one another, so far as details of plumage are concerned, as any two specimens, of any species, that have ever come under my observation.

The following classification of all the specimens* hitherto recorded of both *H. leucobronchialis* (in its widest sense) and '*H. lawrencei*,' expresses my views as to their nature and origin. The arrangement is of course purely hypothetical, but at the same time admits of a much more satisfactory solution of the problem which Mr. Brewster has so carefully discussed than

* A few may possibly have been overlooked.

the theory which supposes *the entire series* to be hybrids of *H. chrysoptera* and *H. pinus* alone, or of their progeny *inter se*.

I. TYPICAL SPECIMENS OF *H. leucobronchialis*.

CHARACTERS. — Throat and cheeks pure white; postocular black or dusky streak very narrow, not involving the auriculars; breast white, or but very faintly tinged with yellow; wing-patch, or bands, yellow.

(1) The type, an adult ♂ from Newtonville, Mass., May 18, 1870. (Cf. Brewster, Bull. Nutt. Orn. Club, I, p. 1, pl. i.)

(2) An adult ♂ shot by Christopher D. Wood, near Clifton, Delaware Co., Penn., May 12, 1877. (Cf. Trotter, Bull. Nutt. Orn. Club, II, pp. 79, 80.)

(3) An adult ♂ in the collection of the Philadelphia Academy of Natural Sciences, supposed to have been shot by J. G. Bell at Rockland, N. Y., in the spring of 1832. (Cf. Trotter, Bull. Nutt. Orn. Club, III, p. 44; IV, p. 59.)

(4) An adult ♂ shot at Wauregan, Conn., May 25, 1875, by Charles M. Carpenter. (Cf. Brewster, Bull. Nutt. Orn. Club, III, p. 99.)

(5) An adult ♂ obtained at Suffield, Conn., July 3, 1875, by E. I. Shores. (Cf. Brewster, Bull. Nutt. Orn. Club, III, p. 199.)

(6) An adult ♂ in collection of Williams College, Williamstown, Mass., obtained at Hudson, Mass., in May or June, 1858, by Samuel Jillson. (Cf. Purdie, Bull. Nutt. Orn. Club, IV, p. 184.)

(7) An adult ♂ shot near Arlington, Va., May 15, 1885, by William Palmer, and by him presented to the National Museum (museum register No. 104,684). (Cf. Palmer, Auk, II, p. 304.)

II. PRESUMED HYBRIDS OF *H. leucobronchialis* AND *H. pinus*, OR OF THE FORMER WITH THE CROSS BETWEEN *H. pinus* AND *H. chrysoptera* (= '*H. lawrencei* HERRICK').

CHARACTERS. — Throat white, sometimes faintly tinged with yellow; breast yellow; gray of upper parts tinged with olive-green.

a. Wing-band, or patch, yellow.

(1) An adult ♂ taken at Portland, Conn., by William W. Coe, May 22, 1875. Has "a broad band or blotch" of yellow on the breast, while "the whole dorsal plumage, from the crown, is faintly washed with the same tint." (Cf. Purdie, Bull. Nutt. Orn. Club, IV, p. 184.)

(2) An adult ♂ taken at Saybrook, Conn., May 30, 1879, by J. N. Clark. Has "a patch of bright yellow across the breast from the bend of the wings." (Cf. Purdie, l. c.)

(3) A young bird (sex unknown) taken by Dr. E. A. Mearns at Highland Falls, N. Y., July 7, 1879 (Coll. W. Brewster, No. 4,668). Specimen number 4 under *H. lawrencei* (No. 4,667, Coll. W. Brewster), said to

be the parent of this specimen. (Cf. Brewster, Bull. Nutt. Orn. Club, VI, p. 221.)

(4) An adult(?), sex not stated, obtained at Sing Sing, N. Y., August 3, 1881, by Dr. A. K. Fisher. Resembles specimen No. 8 (No. 605, Coll. A. K. Fisher), but has the wing-bands "yellow, not white." (Cf. Fisher, Bull. Nutt. Orn. Club, VI, p. 245.)

(5) An adult ♂ (?) obtained in Ottawa Co., Mich., May 25, 1879, by W. A. Gunn. Whole breast bright gamboge yellow, with a sharply defined, truncated anterior outline, but posteriorly extending farthest along the median line, to the upper part of the abdomen; cheeks and chin tinged with light yellow; upper part washed with olive-green. Type of "*H. gunni* Gibbs." (Cf. Gibbs, 'Daily Democrat,' a newspaper of Grand Rapids, Mich., June 1, 1879. — Purdie, Bull. Nutt. Orn. Club, IV, p. 185. — Ridgw. ib., p. 233.)

(6) An adult ♂ taken at Sing Sing, N. Y., August 3, 1881, by Dr. A. K. Fisher (collector's No. 1235). Has "a broad patch of pale yellow on the breast." (Cf. Brewster, Bull. Nutt. Orn. Club, VI p. 219.)

(7) An adult ♀ taken at Sing Sing, N. Y., July 24, 1881, by Dr. A. K. Fisher (collector's No. 1210). Entirely pale greenish yellow beneath; the back is similar to that of *pinus* but the nape is decidedly ashy, and the wing-bands as clearly yellow as in *chrysoptera*; the dusky brown eye-stripe is restricted to the lores and post-orbital spot." (Cf. Brewster, Bull. Nutt. Orn. Club, VI, p. 220.)

b. Wing-bands white.

(8) An adult ♂ collected at Sing Sing, N. Y., August 24, 1879, by Dr. A. K. Fisher (collector's No. 605). "Exhibits a faint wash of lemon yellow on the throat, while a broad space across the breast is deep gamboge yellow, and the wing-bands are pure white." (Cf. Brewster, Bull. Nutt. Orn. Club, VI, p. 219.)

(9) An adult ♀ (?) collected at Nyack, N. J., in May, 1878, by Eugene P. Bicknell; No. 2620, Coll. W. Brewster. "Has the chin decidedly yellow; the throat, cheeks, and a small space on the abdomen white; the remainder of the lower parts gamboge yellow; the wing-bands white; the nape ashy tinged with green; the occiput, back, and wings as purely green as in *H. pinus*." (Cf. Brewster l. c.)

c. Wing-bands mixed white and yellow.

(10) An adult ♂ killed at New Haven, Conn., May 19, 1885, by Harry W. Flint. It "shows a slight suffusion of yellow under each eye and on the chin, as well as a light bar of the same color across the breast . . . the wing-bars are very much restricted, and the white is tinged with yellow, and there is a spot of the same color on the back." (Cf. Sage, Auk, II, p. 304.)

III. PRESUMED HYBRIDS OF *H. leucobronchialis* WITH *H. chrysoptera*.

CHARACTERS. — Entirely white beneath (except on sides), as in *H. leucobronchialis*, but with black auriculars of *H. chrysoptera*.

(1) An adult ♀ (?) obtained at Sing Sing, N. Y., July 24, 1881, by Dr. A. K. Fisher (collector's No. 1208). *Cf.* Brewster, Bull. Nutt. Orn. Club, VI, p. 219.)

(2) An adult ♀ (?) obtained at Sing Sing, N. Y., July 24, 1881, by Dr. A. K. Fisher. (*Cf.* Fisher, Bull. Nutt. Orn. Club, VI, p. 245.)

IV. PRESUMED HYBRIDS BETWEEN *H. chrysoptera* AND *H. pinus*
(= '*H. lawrencei* HERRICK').

CHARACTERS: Black or gray throat and auriculars of *chrysoptera*, with rest of head and the lower parts yellow, as in *pinus*; upper parts olive-green as in *pinus*. Wing-bands yellow or white.

a. Wing-bands white.

(1) The type, an adult ♂, obtained at Passaic, N. J., May, 1874, by Harold Herrick. (*Cf.* Herrick, Pr. Phil. Ac. Nat. Sci. 1874, p. 220, pl. 15.)

(2) An adult ♂ from Hoboken, N. J., taken in the spring of 1876. (*Cf.* Herrick, Bull. Nutt. Orn. Club, II, p. 19.)

b. Wing-bands yellow.

(3) An adult ♀ taken at Highland Falls, N. Y., July 7, 1879, by Dr. Edgar A. Mearns (No. 4667, Coll. W. Brewster). This specimen presents nearly the characters that would be looked for in the female of *lawrencei*; the throat and cheek-markings are those of *chrysoptera* (female), while the remainder of the plumage is colored nearly as in *pinus*, the wing-bands, however, are yellow, instead of white, and the back is not purely olive-green." (*Cf.* Brewster, Bull. Nutt. Orn. Club, VI, p. 220.)

ON *JUNCO CINEREUS* (SWAINS.) AND ITS GEOGRAPHICAL RACES.

BY ROBERT RIDGWAY.

An examination of a very large series (78 specimens) of this species makes apparent some very interesting facts. It shows

that *J. cinereus* proper must be excluded from the list of North American birds, all the specimens from within the borders of the United States which have been referred to this form being very different, belonging in reality to an unnamed geographical race. It is with extreme reluctance that I venture to describe an additional form of this difficult genus, but the facts before me are so plain that I cannot well avoid doing so.

J. cinereus, as at present known, is divided into three strongly marked races, between two of which (*dorsalis* and the new form) we have evidence of intergradation in a small proportion of intermediate specimens. In the case of the new form and true *cinereus* intergradation is assumed, but is hardly less certain.

The geographical distribution of the three races is, in the main, quite distinct: *J. cinereus* belonging to the eastern mountain districts of Mexico (from the Sierra Madre of Chihuahua to the high regions of Vera Cruz), *J. cinereus dorsalis* to the mountains of New Mexico and Eastern Arizona (White Mountains and Willow Springs), while *J. cinereus palliatus*, as I propose to name the new form, belongs exclusively, so far as known, to the mountains of Central and Southern Arizona (Mt. Graham, the Santa Rita range., etc.), but probably extends southward along the more western mountain ranges of Mexico.

The three races may be distinguished as follows:—

a. Outer web of tertials and some of the wing-coverts rufous.

1. *J. cinereus*. Upper parts of head and neck, with rump, dark gray inclining to state-color, the rump often tinged with olive; lores deep black.
2. *J. cinereus palliatus*. Upper parts of head and neck, with rump, clear ash-gray; lores grayish black.

b. Outer surface of wings entirely ash-gray.

3. *J. cinereus dorsalis*. Upper parts of head and neck, with rump clear ash-gray, and lores grayish black, as in *J. cinereus palliatus*.

The type of *J. cinereus palliatus* is No. 68817, U. S. Nat. Mus., ♂ ad., Mt. Graham, Arizona, Sept. 19, 1874; H. W. Henshaw collector.

RECENT LITERATURE.

Sharpe's Catalogue of the Birds in the British Museum—Volume X.*

—Ornithologists are under obligations to Mr. Sharpe for another exceedingly welcome volume of a pre-eminently useful series. Volume X considerably exceeds in size any of its predecessors, it containing nearly 900 pages, and twelve colored plates. It treats of the following five families of nine-primaried Oscines: the Flower-peckers (Dicæidæ), the Swallows (Hirundinidæ), the Waxwings and their allies (Ampelidæ), the American Warblers (Mniotiltidæ), and the Wagtails (Motacillidæ). "In the present volume 448 species are described, represented by 4590 specimens." Only 52 of the species are still desiderata to the collection of the British Museum, while 88 are represented by the original types. In addition to the material in the British Museum, Mr. Sharpe has had the assistance of valuable collections kindly loaned him by various eminent ornithologists for use in the preparation of the present monographs. The British Museum "series of Neotropical birds has been rendered wonderfully complete by the addition of the collections of Dr. Sclater and Messrs. Salvin and Godman"; and acknowledgment is also made of numerous North American birds received from the United States National Museum. Mr. Sharpe's facilities for the preparation of his various monographs are enviably complete, and without doubt elsewhere unequalled.

The Dicæidæ, numbering 19 genera and 95 species of a strictly Old World group, occupy the first 84 pages, and are illustrated by two beautiful plates. To the Hirundinidæ, with 11 genera and 83 species (*plus* 18 subspecies), are allotted 125 pages, and a single plate. The great family Mniotiltidæ, of such special interest to American ornithological collectors, occupies nearly 250 pages, numbers 21 genera and 127 species, besides numerous subspecies. Of the species 36 fall under *Dendræca*, 32 under *Basileuterus*, and 15 under *Setophaga*. Of the 64 species of Motacillidæ, 33 are ranged under *Anthus*, and 23 under *Motacilla*.

In respect to subspecies, we regret to see that Mr. Sharpe has reverted to his former practice of designating them simply by binominal appellations, with usually no further comment on their status than is implied by the prefix 'Subsp.' followed by a Greek letter.

We also regret to see our author so firmly opposed to "radical changes in nomenclature" as to prefer to "follow custom" in cases where he is convinced that the 'radical changes' are in accordance with strict nomenclatural rules, through fear that the "change is too great and the risk of confusion too assured" (p. 85) for him to venture in the footsteps of the rash reformers who persist in pointing out the narrow way which leads

* Catalogue of the Birds in the British Museum, Volume X. Catalogue of the Passeriformes, or Perching Birds, in the collection of the British Museum.—Fringilliformes: Part I. Containing the Families Dicæidæ, Hirundinidæ, Ampelidæ, Mniotiltidæ, and Motacillidæ. By R. Bowdler Sharpe. London: Printed by order of the Trustees, 1885. 8vo, pp. xiii + 682, pll. xii.

to stability and consistency in things nomenclatural. It is certainly poor philosophy, and worse principle, to go wrong because the majority of one's associates or predecessors have missed the right path. While Mr. Sharpe seems to have by no means warmly embraced the *auctorum plurimorum* principle of one of his eminent confrères, he shows a tendency to lapse in that direction. If rules of nomenclature are to be otherwise than worse than useless, they must be followed systematically and on all occasions, whether their immediate results chance to be agreeable or the reverse.

In monographs of such extended scope it is doubtless too much to expect that the monographer's rulings will be equally sound at all points, his conclusions necessarily depending upon the amount of his material in each particular case. Again, specialists having the same material before them may reach different conclusions, consequent upon what may be termed theoretical bias, which may lead to a different interpretation of the same facts; although experience shows that experts working with the same material, and particularly if working together and comparing notes as they proceed, may frequently arrive at practically the same results. It is not, therefore, on the whole surprising that Mr. Sharpe should differ now and then from other authorities in the same field, even in cases where his material is comparatively limited.

As some of Mr. Sharpe's rulings respecting American birds may be presumed to be of special interest to the the readers of 'The Auk,' they are here presented. Our Barn Swallow (*Hirundo erythrogastra*) is made a subspecies of the European Chimney Swallow (*Hirundo rustica* Linn.), the American form being found to extend across Asia to Lake Baikal, and to winter in Burmah. Our bird would therefore stand, in a trinomial system of nomenclature, as *Hirundo rustica erythrogastra*. Mr. Sharpe recognizes four subspecies of *Hirundo rustica*, besides the *H. rustica* proper. Our Cliff Swallow is *Petrochelidon pyrrhonota* (Vieill.), Mr. Sharpe following Sclater and Salvin (1873) in identifying Vieillot's *H. pyrrhonota* (1817) with Say's *H. lunifrons* (1823).

Passing to the Warblers, *Helminthophila lutescens* is considered a thoroughly good species, and surprise is expressed that the "trinomial name of *H. celata lutescens* should be given to it"; but two possible explanations are offered (p. 245). The ten specimens at Mr. Sharpe's disposal are not deemed by him sufficient to settle the alternatives raised, namely, whether *lutescens* is a thoroughly good species or whether the bird breeds in the yellow plumage of the first year. In respect to the generic name *Parula*, Mr. Sharpe observes that if the name *Parula* must be suppressed because there is a previous genus *Parulus*, then "*Pica* must be suppressed on account of its resemblance to *Picus*." *Parula* and *Parulus* are known to be the same word, with simply different terminations indicative merely of gender. *Pica* and *Picus* may have the same relation, as some authorities claim, while others maintain that the two words are etymologically different. At all events the two cases are not quite parallel, *Pica* and *Picus* having been long used in classical Latin to denote respectively

Magpie and Woodpecker before they were introduced into technical zoölogy, whatever may have been primarily — a point doubtless impossible to strictly determine — their etymological affinities.

Dendrocica dominica albilora is denied status, even as a subspecies, since in many specimens Mr. Sharpe can "trace a tiny shade of yellow in the eyebrow," even in authentic specimens received from our National Museum; yet the alleged differences pretty constantly characterize the birds of a certain geographical area. The race *hypochrysa* of *D. palmarum* is also not recognized. *Peucedramus* is admitted as a full genus (by the way, subgenera seem a round in the ladder of classification Mr. Sharpe does not appear to find use for!), while *Helinae*, a much more distinct form, is referred to *Helminthotherus*. The substitution of *Micrologia* by Mr. Cory for his *Ligea* does not appear to be taken note of, even in the 'Aldenda,' presumably printed nearly a year after the change was published.

In *Geothlypis trichas* the male in winter is said to assume the dull garb of the female, losing the black mask, and is thus figured (pl. ix, fig. 1), although in fact the male never loses the black mask after it has once been acquired, and which it obtains at the second moult. Only young males of the first year wear the garb of the female. But Mr. Sharpe should not be too harshly dealt with for this lapse, since the same mistake has been made by several of our own leading authorities, Messrs. Maynard and Cory being apparently the only writers who have escaped this error. This singular mistake seems to have originated with Baird (Birds of N. Am., 1858, p. 241), who says the male in winter is "without the black mask." In the 'History of North American Birds,' by Baird, Brewer, and Ridgway, it is said (I, p. 297): "Male in winter, and the female, without the black mask." Coues, in 'Birds of the Colorado Valley' (p. 311), says: "The adults, in fall and winter, are similar to each other, . . . as at that season the peculiar black and ashy markings of the head are wanting." The same statement is repeated in the second edition of his 'Key.' Maynard, however, in 1874, in describing the adult male (Birds of Florida, p. 66) says: "There is no change of plumage in autumn, . . ." Mr. Cory in his 'Birds of the Bahamas' (1880, p. 72) says, in italics, in describing the winter plumage of the male, "*a broad black line passing from the sides of the neck through the eye and over the forehead.*" The older authors, as Wilson, Nuttall, and Audubon, are not explicit in their statements on this point, but *do not* say that the adult male in winter lacks the black mask, while the opposite is inferrible, at least in the case of Nuttall, who, as well as Audubon, was familiar with the species in its winter haunts. To any one who has collected the birds in winter in Florida, or elsewhere in their winter haunts, the *perpetuation* of such a gross error is almost incomprehensible, especially since the material in at least several of our museums is sufficient to render it evident, even to the 'closest' naturalist.

In the collection of the Museum of Comparative Zoölogy is a large series of adult males taken in Florida by Messrs. Maynard, and Henshaw,

and the writer of this review, at frequent intervals from early in December till into March, which differ not in the least in respect to the black face-markings from summer specimens. And similar examples are, to our knowledge, in various collections, both public and private, notably in those of Messrs. Brewster, Cory, and others, and that of Princeton College.

Four beautiful plates illustrate Mr. Sharpe's monograph of the Mniotiltidæ, in which are figured the heads of eight species of *Geothlypis*, while full-length figures are given of *G. speciosa*, *Parula pitiayumi*, *P. nigrilora*, *Teretristis fernandina*, and *T. fornsi*.

The genus *Polioptila* (with 13 species) is noticed in an 'Appendix to the family Mniotiltidæ' (pp. 440-445), the group having been omitted by Mr. Seebohm from the Sylviidæ, where authors have generally placed it. Mr. Sharpe believes that their most natural position is "in the vicinity of the Muscipine genus *Stenostira*."

In the family Motacillidæ, the Field Wagtails, usually separated as a genus *Budytes*, are placed with the Water Wagtails under the single genus *Motacilla*, there being "certain intermediate species . . . which unite these two supposed genera." Yet he considers it expedient to continue the generic separation of *Anthus spraguei* from *Anthus* proper, under the genus *Neocorys*. As already noticed (*antea*, p. 290, footnote), our Titlark is made a subspecies of the Old World Water Pipit, *Anthus spinoletta*, (*spinoletta* Linn., and 'auct. plur.'), under which it stands as "Subsp. *a*. *Anthus pennsylvanicus*." A similar disposition of it was made previously by Mr. Seebohm (Hist. Brit. Bds., II, 1883, p. 248). The adoption of 'radical changes' in specific names, when called for by nomenclatural rules does not seem to inspire in our author, we are glad to see, the same degree of dread as 'radical changes' in generic names, though we fail to trace any principle of consistency in such diverse action under similar contingencies.—J. A. A.

Turner's List of the Birds of Labrador.*—While Mr. Turner's 'List' is very valuable, and will prove very useful, it is at the same time disappointing and unsatisfactory, owing largely to the faulty plan of its construction. Mr. Turner spent nearly two years and four months (from July 15, 1882, to October 5, 1884) in Labrador; his investigations being made chiefly "in the vicinity of Fort Chimo, situated about 27 miles up the Koksoak River, flowing into Ungava Bay, which is an immense pocket toward the eastern portion of the south side of Hudson Strait," where he "remained from August 6, 1882, to September 4, 1884." His list includes about 207 species, only a few more than one-half of which appear to have come under his own observation. Quite a number of the others are

* List of the Birds of Labrador, including Ungava, East Main, Moose, and Gulf Districts of the Hudson Bay Company, together with the Island of Anticosti. By Lucien M. Turner. Proc. U. S. Nat. Mus., VIII, 1885, pp. 233-254. Published July 13, 1885.

given apparently from specimens in the National Museum, collected by Mr. C. Drexler, mainly at Moose Factory, but some 70 or more rest on the authority of previous authors, as Audubon, Richardson, Nuttall, Coues, Kumlien, Stearns, and Brewster, including seven recorded only from Anticosti, or other points south of Labrador. The area intended to be covered by the List extends from Anticosti and the Gulf of Saint Lawrence to Hudson Strait, and from the Atlantic coast westward to the 82d meridian, or a region some six hundred miles in length by about one thousand miles in breadth. It is apparently intended to be a complete list of the birds hitherto observed in Labrador, although the only statement to this effect is that implied in the title of the paper.

Our first criticism relates to what we deem a radical fault in the construction of the List, namely, the omission of the author to divide the species into two categories, the first to include only the species observed by him within his own field of investigation about Fort Chimo, the second to consist of the additional species attributed to Labrador by previous explorers. Respecting the species actually collected or observed by the writer, we must confess to a feeling of disappointment that he tells us so little about them, his remarks rarely exceeding a few lines to each, while in many cases more detailed statements would have been of the highest interest. This certainly was not due to any lack of opportunity for observation, for the magnificent collection of material brought back by him to the National Museum testifies alike to his success and great industry in collecting. For instance, it is quite tantalizing to find species like the Redpolls dismissed with less than two lines, merely stating that the species is abundant and resident at Fort Chimo, that it breeds plentifully there, and that its nests and eggs were obtained. On the other hand, his record of species observed by others is sufficiently explicit and apparently has been very carefully compiled, although all are obviously not included, as, for instance, *Larus canus* among the Gulls, and *Somateria v-nigra* among the Ducks.

Again, it is disappointing to find a writer who has had so much experience as a collector in the country under notice giving these reports and extracts without comment as to their character, in cases even where the temptation to a little intelligent criticism must have been very strong, as, for instance, where *Dendroica carulea*, *Vireo noveboracensis*, *Pipilo erythrophthalmus*, *Tyrannus tyrannus*, *Sayornis phæbe*, *Contopus virens*, and the two Cuckoos are given on the authority of Audubon, and *Hylocichla mustelina* and *Aix sponsa* on Stearns's authority. While we would not imply any sweeping discredit upon the observations of Audubon, we can not help feeling that in writing out his biographies of birds he sometimes trusted to memory rather than to carefully recorded field-notes. While thus freely criticising the paper under notice, we do not lose sight of the fact that it is a most important and welcome contribution to our knowledge of the birds of a region Mr. Turner has been the first to explore, and at the cost, too, of a long sojourn in a most inhospitable country, necessarily entailing much hardship.—J. A. A.

Zeledon's Catalogue of the Birds of Costa Rica.*—This is simply an enumeration of the birds of Costa Rica, without notes. The catalogue numbers 692 species, about eight to nine tenths of them being indicated as represented in the National Museum by *Costa Rican specimens!* The identification of the species is therefore doubtless beyond question. This list is intended as preliminary to a work of a more extended character to contain descriptions of the genera and species, with notes on their habits and geographical distribution, which the author has in contemplation, and for which his long residence in the country, and his unrivalled experience with the birds of Costa Rica eminently fit him to prepare.—J. A. A.

Ridgway on New American Birds.—Mr. Ridgway has separated the Boat-billed Heron of Central America from that of Guiana and Brazil, under the name *Cancroma zeledoni*.† Twelve examples from southern and western Mexico, Guatemala, Nicaragua, Costa Rica, and Veragua are found to differ constantly from two South American specimens (British Guiana and mouth of the Amazon) in having the upper parts much deeper pearl-gray, the neck and breast deep buff instead of white, and the crest less developed.

The same author has also described a new Hawk from Cozumel, under the name *Rupornis gracilis*.‡ It is compared with *R. ruficauda griseicauda* of Mexico, from which it differs in being decidedly smaller, with the thighs and under wing-coverts nearly immaculate instead of barred and spotted.

A re-examination of some specimens of *Peucaea* collected by Dr. J. C. Merrill, and identified by Mr. Ridgway as *Peucaea arizonæ* (Proc. U. S. Nat. Mus., I, p. 127), in the light of additional material, shows that the specimens represent *Coturniculus mexicana* of Lawrence, described from Mexican specimens in 1867, and subsequently referred by Mr. Ridgway (Hist. N. Am. Birds, II, p. 38, footnote) to *P. botterii*. A second examination of the Texas specimens, in comparison with the Mexican examples, results in the addition of a new bird to the fauna of the United States, which Mr. Ridgway calls *Peucaea mexicana* (Lawr.).

In a paper on the Golden Warblers§ Mr. Ridgway describes a new subspecies from Western Mexico and Cape St. Lucas as *Dendroica bryanti castaneiceps*. *D. bryanti* is now separated specifically from *D. vieilloti*, to which it was originally referred as a subspecies, and its habitat is restricted to the "Atlantic coast, Belize to Northern Yucatan (Merida)."

* Catalogue of the Birds of Costa Rica, indicating those species of which the United States National Museum possesses specimens from that Country. By José C. Zeledon, of San José, Costa Rica. Proc. U. S. Nat. Mus., VIII, pp. 104-118. Published May 23, 1885.

† Description of a New Species of Boat-billed Heron from Central America. By Robert Ridgway. Proc. U. S. Nat. Mus., VIII, pp. 93, 94. Published May 20, 1885.

‡ Description of a New Hawk from Cozumel, *Ibid.*, pp. 94, 95.

§ A Review of the "Golden Warblers." *Ibid.*, pp. 348-350. Published Sept. 2, 1885.

the Lower California bird receiving the new name *castaneiceps*. Seven species and ten subspecies of Golden Warblers are now recognized only two of which (*D. æstiva* and *D. bryanti castaneiceps*) pertain to the fauna of North America, as defined in the new 'A. O. U. Check List,' the remainder being West Indian and Central American.—J. A. A.

Ridgway on the Type Specimen of *Buteo oxypterus* Cassin.*—A re-examination of the type specimens of *Buteo oxypterus* Cassin, preserved in the Museum of the Philadelphia Academy of Natural Sciences, has led Mr. Ridgway to refer *B. oxypterus* to *B. swainsoni* as a pure synonym, the type of *oxypterus* proving to be unquestionably a young *B. swainsoni*. "Upon the whole," says Mr. Ridgway, "I cannot see the slightest reason for recognizing '*B. oxypterus*' even as a local race of *swainsoni*," He also adds that the "specimen described in 'History of North American Birds' (III, p. 266) as the melanistic adult of '*Buteo swainsoni* var. *oxypterus* is not *B. swainsoni* at all, but *B. fuliginosus* Scl." Comparative diagnoses are given of these two species.—J. A. A.

Ridgway's List of Emended Names of North American Birds.†—The names "represent new or hitherto unpublished combinations" adopted by the A. O. U. 'Committee on Classification and Nomenclature of North American Birds.' "They are here presented in order that the first known use of such combinations may be cited among the references which the committee has decided to give under each species, viz., the first pertinent binomial or trinomial appellation, and the first use of the name as adopted in the new list now being prepared by the committee." The changes, some 77 in number, relate chiefly to the generic part of the name, and result largely from the depression of formerly current genera to the rank of subgenera, partly from the change of status of the form in question from specific to subspecific rank, or the reverse, and in small part from actual change of names, found necessary on synonymic grounds. Comparatively few are therefore of a very 'radical' character, and are mainly the following, with which are given their current equivalents.

Parus cinctus oblectus (Cab.) = *P. cinctus*.

Sylvania microcephala Ridgw. = *Myiodioides minutus*.

Pyranga rubra cooperi = *P. æstiva cooperi*.

Loxia curvirostra stricklandi Ridgw. = *L. c. mexicana*.

Ammodramus savannarum passerinus = *Coturniculus passerinus*.

Melospiza georgiana (Lath.) = *M. palustris*.

Corvus corax sinuatus (Wagl.) = *C. c. carnivorus*.

Aphelocoma sieberti arizonæ = *A. sordida arizonæ*.

Zenaidura macroura = *Z. carolinensis*.

* Remarks on the Type Specimen of *Buteo oxypterus*, Cassin. By Robert Ridgway, Proc. U. S. Nat. Mus., VIII, pp. 75-77. Published April 22, 1885.

† Some Emended Names of North American Birds. By Robert Ridgway, Proc. U. S. Nat. Mus., VIII, pp. 354, 355. Published Sept. 2, 1885.

Callipepla californica vallicola Ridgw. = *Lophortyx californica brunescens* Ridgw. = *L. californica* (Shaw).

Among the more striking changes of generic names are the substitution of *Sylvania* for *Myiodioides*, *Dryobates* for *Picus*, *Dendragapus* for *Canace*, and *Tympanuchus* for *Cupidonia*, in addition to some others already published in 'The Auk.'—J. A. A.

Minor Ornithological Publications.—964. *Decorative Sentiment in Birds*. By James Carter Beard. *Harper's New Monthly Magazine*, LXXI, No. 423, Aug. 1885, pp. 405-416.—A popular paper, with illustrations, on bird architecture.

965. *Circular of the Public Museum of the City of Milwaukee*. No. 1. "Some Directions for Preparing, Labelling and Packing Skins of Animals." No. 2. "List of Mammals and Birds of Wisconsin desirable for the above named Museum." 8vo. No date (1884?), pp. 8 and 12.—No 1 contains excellent directions for the purpose in view.

966. *Observe the Birds*. By Samuel Wells Willard. *Wisconsin Journ. of Education*, XXV. No. 3, March, 1885, pp. 98-101.—Ornithology recommended as offering a good field for the cultivation of the powers of observation.

967. *Our Observers—March*. By F. H. King. *Ibid.*, pp. 111, 112.—A list of "Observations to make" respecting a few birds, beasts, insects, and plants, etc.

968. *The Migration of Birds*. By Alexander O'Driscoll Taylor. *Proc. Newport Nat. Hist. Soc.*, 1883-84, pp. 22-24.—Abstract of a paper on this subject read before the Society on Jan. 3, 1884.

969. *List of Birds shot near Newport [R. I.]*. By Col. John Hare Powel. *Ibid.*, pp. 42, 43.—A nominal list (under English names only) of 101 species.

970. *Pigeons and the Pigeon Fancy*. By Wm. G. Barton. *Bull. Essex Inst.*, XVI. 1884, pp. 59-82.—A very interesting summary of the subject, giving a brief history of the 'pigeon fancy,' and describing briefly the leading varieties of the domesticated bird. Several pages are devoted to the 'Homing Pigeon,' or 'Carrier' Pigeon, and to 'Pigeon-racing,' giving statistics of flights, etc.

971. *Intelligence in Birds*. By E. E. Fish. *Bull. Buffalo Naturalists' Field Club*, I, No. 6,* 1884, pp. 129-138.—On change of habits in consequence of experience, with citation of various instances, and remarks on instinct, the migration of birds, and various interesting anecdotes illustrative of the general subject.

972. *The Ducks of this Locality [Ottawa, Canada]*. By W. P. Lett. *Trans. Ottawa Field-Naturalists' Club*, No. 4, pp. 52-64.—The following species are treated at length: *Anas obscura*, *A. boschas*, *Aix sponsa*, *Querquedula carolinensis*, *Q. discors*, *Dafila acuta*, *Fuligula ferina americana*, *Mergus merganser*, *M. serrator*, *M. cucullatus*, and *Clangula*

* For index to ornithological articles in Nos. 1-5 of this publication see *Auk*, I, pp. 184, 189, 190.

glaucium. Various other species are mentioned more briefly, the paper altogether forming an important review of the Anatidæ of Ottawa.

973. *Report of the Ornithological and Oölogical Branch [of the Ottawa Field Naturalists' Club]*. By George R. White and W. L. Scott. *Ibid.*, pp. 81-87.—Thirteen species are added to the List of the Birds of Ottawa by Messrs. White and Scott published in No. 3 of the 'Transactions' of the Club (see Bull. N. O. C., VIII, pp. 55 and 115), and there are notes on a few species previously recorded, with dates of the arrival of birds in the spring of 1882. Also a list of *errata* for the 'List' previously published.

974. *Report of the Ornithological and Oölogical Branch [of the Ottawa Field-Naturalists' Club] for the season of 1883*. By John Macoun, Geo. R. White, and W. L. Scott. *Ibid.*, II, No. 1, 1884, pp. 141-147.—Besides interesting notes on several species of birds previously recorded, 17 species are added. There is also a list of arrivals for the spring of 1883.

975. *Washington Crows*. Anon. *Atlantic Monthly*, Vol. LIII, No. 318, April, 1884, pp. 580, 581.—A graphic account of their flight in the morning from their roosting-place to their feeding grounds, and their return at night.

976. [*The Sense of Taste in Birds.*] By G. F. Waters. *Proc. Boston Soc. Nat. Hist.*, XXII, 1883 (1884), pp. 433, 434.—In the common fowl and some young Hawks.

977. *On the Migration of Birds in the Spring and Autumn of 1884*. By J. A. Harvie Browne, F. R. S., F. Z. S. *Bull. U. S. Fish Comm.*, V, No. 14, Aug. 7, 1885, pp. 221-224. — On the influencing causes of the extensive migration of Gulls to the British coast in 1884-'85.

978. *Our Home Feathered Tribe*. By B. H. Warren. *West Chester, Pa., Local News* (newspaper), Sept. 3, 1885.—A briefly annotated list of the summer birds of Chester County, Pennsylvania. (See also an addendum to the list in the same newspaper of Sept. 10, 1885.)

'The Zoologist' (London), Vols. VI-IX (1882 to Sept. 1885), contains the following (Nos. 979-1002) relating especially to North American birds.

979. *European Birds observed in North America*.—By Percy E. Freke. *Zoologist*, 3d Series, VI, Jan. 1882, p. 21.—Corrections to his article on this subject in the 'Zoologist' for Sept. 1881 (*cf.* Bull. N. O. C., VIII, p. 115) *Phylloscopus borealis* and *Parus cinctus* found breeding in Alaska, and *Mareca penelope* in the Aleutian Islands; the Iceland Falcon obtained from Labrador.

980. *Supposed Occurrence of the Hairy Woodpecker [Picus villosus] in Oxfordshire*. By Oliver V. Aplin. *Ibid.*, Feb. 1882, p. 69.—A specimen is mentioned alleged to have been killed about five years previously near Chipping Norton, but doubt exists as to whether the skin examined was not of foreign origin.

981. *Rusty Grackle and Pallas's Gray Shrike in Wales*. By Henry Seebohm. *Ibid.*, March, 1882, p. 109.—A specimen of *Scolecophagus ferrugineus* killed at Cardiff, Oct. 4, 1881, recorded, forming the first British record of the species.

982. *On the Occurrence of Sabine's Gull, for the first time, in Norfolk.* By Henry Stevenson. *Ibid.*, pp. 111-113.—Two specimens seen and one killed at Yarmouth, Oct. 21 or 22, 1881.

983. *Red-breasted Snipe in Northeast Lincolnshire.* By John Cordeaux. *Ibid.*, Oct. 1882, p. 392.—Record of a specimen of *Macrorhamphus griseus* shot on the seacoast between Cleethorpes and Tetney Haven, Aug. 15, 1882.

984. *Totanus solitarius at Scilly.* By Thomas Cornish. *Ibid.*, Nov. 1882, p. 432.—Taken Sept. 21, 1882.

985. *On Trinomial Nomenclature.* By Joel Asaph Allen. *Ibid.*, VII, Feb. 1883, pp. 97-100.

986. *Bonaparte's Gull at St. Leonards-on-Sea.* By Cecil Smith. *Ibid.*, March, 1883, p. 120.—*Larus philadelphia*, shot "early in November, 1870."

987. *Occurrences of the American Kestrel in Yorkshire.* By J. Backhouse, Jr. *Ibid.*, p. 126.—A female *Falco sparverius* shot near Helmsley, Yorkshire, in May, 1882; believed to be "the only one on record as having been taken in Europe."

988. *Uncommon Birds near York.* By C. D. Wolstenholme. *Ibid.*, p. 128.—Records "an American Bittern (*Botaurus lentiginosus*), shot at Welbury."

989. *Pectoral Sandpiper [Tringa maculata] in Dumbartonshire.* By J. E. Harting. *Ibid.*, April, 1883, p. 177.—A specimen killed Nov. 24, 1882.

990. *American Bittern in Pembrokeshire.* By Cecil Smith. *Ibid.*, Aug. 1883, p. 341.—Taken at St. David's in October, 1872, and previously recorded "with doubt at the times," in 'Land and Water,' by Mr. Greenway.

991. *The last Great Auk.* By J. E. Harting. *Ibid.*, Nov. 1883, p. 470.—A call for information respecting a specimen recorded by Mr. Ruthven Deane (*Am. Nat.* VI, 1872, p. 369), on the authority of Mr. Alfred Lechevallier, as found dead on the coast of Labrador in 1870.

992. *American Bittern in Sussex.* By W. Barrer. *Ibid.*, VIII, Feb. 1884, p. 68.—A female was taken near Amberly, Sussex, Engl., Nov. 30, 1883.

993. *The last Great Auk.* By J. E. Harting. *Ibid.*, April, 1884, pp. 141, 142.—Relates to a discrepancy in letters of Mr. A. Lechevallier about a specimen of the Great Auk alleged to have been found dead on the coast of Labrador in November, 1870, and obtained by him, record of which was made by Mr. Ruthven Deane in the 'American Naturalist' for 1872 (*Vol.* VI, p. 369). The validity of the record thus made on Mr. Lechevallier's authority appears to be hereby much impaired. (See above, No. 991.)

994. *Occurrence of the Swallow-tailed Kite in Europe.* By E. F. Becher. *Ibid.*, Apr. 1884, p. 145.—Taken on board a ship 'several years back,' about 200 miles from Malta.

995. *On the Application of Trinomial Nomenclature to Zoology.* By Dr. Elliot Coues. *Ibid.*, July, 1884, pp. 241-247.—Dr. Coues's address on this subject before National Academy of Sciences in Washington, April, 1884.

996. *Sabine's Gull in Dublin Bay.* By J. J. Dowling. *Ibid.*, Dec. 1884, p. 490.—A specimen in the first year's plumage was taken at Cloutarf, Nov. 5, 1884.

997. *The American Killdeer Plover in Cornwall.* By Thomas Cornish. *Ibid.*, IX, March, 1885, p. 113.—A specimen of *Aegialitis vociferus* shot at Tresco, in the Scilly Islands, Jan. 15, 1885.

998. *Reported Occurrence of the Blue-winged Teal near Redcar.* By T. H. Nelson. *Ibid.*, p. 113.—A specimen previously recorded (Zoologist, 1882, p. 92) by the same writer as *Querquedula discors* proves to have been a young Garganey (*Q. circia*).

999. *Notes on Birds of Manitoba.* By Robert Miller Christey. *Ibid.*, April, 1885, pp. 121-133.—Interesting field notes on about 45 species.

1000. *Notes on the Zoology of Manitoba.* By the late T. B. Wood. (Communicated by J. H. Nelson.) *Ibid.*, June and July, 1885, pp. 224-227, 241-247.—Extracts from letters to Mr. Nelson, giving various interesting notes.

1001. *Bartram's Sandpiper . . . in Cornwall.* By H. E. Dresser. *Ibid.*, p. 232.—Record of a specimen shot "as already recorded in the 'Zoologist,'" several years previously on the cliffs near Coverack.

1002. *Discovery of the Eggs of the Knot, Tringa canutus.*—By J. E. Harting. *Ibid.*, Sept. 1885, p. 344.—Referring to Dr. C. Hart Merriam's record in 'The Auk' (II, p. 312), and stating that "Sabine found the Knot breeding in abundance on Melville Island" in 1820, and that "Capt. Lyons found it breeding near Quilliam Creek, Melville Peninsula," in 1823. Reference is also made to Sir John Richardson's reporting "the Knot as breeding in Hudson's Bay, and down to the 55th Parallel," etc.

Publications Received.—Bicknell, Eugene P. A Study of the Singing of Our Birds. (Auk, 1884, 1885.)

Harvie-Brown, J. A., J. Cordeaux, R. M. Barrington, G. A. Ware, and W. Eagle Clarke. Report on the Migration of Birds in the Spring and Autumn of 1884. Sixth Report. (Vol. II, No 1.)

Merriam, C. Hart. Department of Agriculture, Division of Entomology, Circular No. 20.

Riley, C. V. Department of Agriculture, Division of Entomology. Circular No. 18.

Ridgway, Robert. Some Emended Names of North American Birds. (Proc. U. S. Nat. Mus., VIII, No. 23, Sept. 2, 1885, pp. 354-356.)

Shufeldt, R. W. On the Coloration in Life of the Naked Skin-tracts on the Head of *Geococcyx californianus*. (Ibis, 1885, pp. 286-288, pl. vi.)

Nelson, E. W. Counter-Notes on some species of Birds attributed to Point Barrow, Alaska. (Auk, II, pp. 239-241.)

Stephens, F. Notes of an Ornithological trip in Arizona and Sonora. (Auk, II, pp. 225-231.)

Zeledon, Catalogue of the Birds of Costa Rica, indicating those Species of which the United States National Museum possesses specimens from that Country. (Proc. U. S. Nat. Mus., VIII, Nos. 7, 8, pp. 104-118, May, 1885.)

Agassiz Journal (Lynn, Mass.), I, No. 3, Aug. 1885.

American Field, XXIII, Nos. 25, 26, XXIV, Nos. 1-12.

American Naturalist, Aug. Sept. Oct. 1885.

Anzeiger, Zoologischer, Nos. 197-203, 1885.

Bulletin Des Moines Acad. Sci., I, No. 1, March, 1885.

Bulletin Essex Institute, XVII, Nos. 1-3, Jan.-Mar. 1885.

Bulletin U. S. Fish Commission, V, Nos. 7-21, 1885.

Canadian Science Monthly, III, June, July, 1885.

Forest and Stream, XXIV, Nos. 21-26, XXV, Nos. 1-8, 1885.

Hoosier Naturalist (Valparaiso, Ind.), I, Nos. 1, 2, Aug. Sept. 1885.

Journal Cincinnati Soc. Nat. Hist. VIII, No. 2, July 1885.

Kansas City Review, IX, No. 1, Aug. 1885.

Monatsschrift des Deutschen Vereins zum Schutze der Vogelwelt, IX, Nos. 9-12, 1884, X, Nos. 1-5, 1885. (From H. Nehrling.)

Museum, The, I, No. 3, July, 1885.

Naturalist, The, A Journ. Nat. Hist. for the North of England, Nos. 120-122, July-Sept. 1885.

Naturalists' Companion (Brockport, N. Y.), I, Nos. 1, 2, July, Aug. 1885.

Ornithologist and Oölogist, X, Nos. 8, 9.

Proceedings Biolog. Soc. Washington, II (July 1, 1882, to July 1, 1884), 1885.

Proceedings Nat. Hist. Soc. Glasgow, V, pt. 3, 1884. I (New Series) pt. 1, 1885.

Random Notes on Natural History, II, Nos. 7-9, 1885.

Transactions Kansas Acad. Sci., IX, 1885.

Ward's Nat. Sci. Bulletin, III, Nos. 1, 2, Jan. July 1884.

Zoologist, July, Aug. Sept. 1885.

GENERAL NOTES.

Kirtland's Warbler from the Straits of Mackinac.—In a lot of birds sent me by William Marshall, Esq., keeper of the light-house on Spectacle Reef, Michigan, is a male specimen of Kirtland's Warbler (*Dendroica kirtlandi*). It killed itself by striking the light at that place on the night of May 21, 1885. Found with it, dead at the foot of the tower, were *Turdus mustelinus*, *Dendroica blackburniæ*, *D. maculosa*, *Sialia auricapillus*, *Passerculus savanna*, and *Tringa minutilla*. Spectacle Reef is in the western part of Lake Huron near the Straits of Mackinac, midway between the north and south shores.—C. HART MERRIAM, *Locust Grove, N. Y.*

Odd Nesting Habits of the Blue Yellow-backed Warbler in Missouri.—

Mr. Otto Widmann has kindly sent me a nest of the Blue Yellow-backed Warbler (*Parula americana*) which he took near St. Louis, Mo., June 8, 1885. It differs in every particular from the delicate pensile nest which the species commonly builds in the East, where hanging lichens abound on the trees. Mr. Widmann writes me: "It was situated in a bunch of dead leaves and rubbish, such as is often found hanging from those branches of trees which are reached by high water in creeks, freshets, etc. The tree from which I took the nest is a birch, and the twig a long pendulous one, the terminal three feet of which had been immersed by the last high water and had caught and retained a bulky conglomeration of straw, sticks, and dry leaves. At the time of collection (June 8) the nest was 6-8 feet above the water (of Meramec River, St. Louis Co.), and contained five young ones about ten days old."

The nest itself is a small, open, cup-shaped affair, composed chiefly of small rootlets, fine grass, and a moss, intermixed with a few tufted seeds of some plant, and sparingly lined with horse hairs. It measures, externally, 70 mm. in diameter by 70 mm. in depth; internally, 45 mm. in diameter by 40 mm. in depth.—C. HART MERRIAM, *Locust Grove, N. Y.*

Swainson's Warbler in Jamaica.—The following note is intended to supplement the information already contributed to this Journal by Mr. Brewster and others concerning the distribution of Swainson's Warbler (*Helinaia swainsoni*).

In the Proceedings of the Zoölogical Society of London for 1879, Prof. Alfred Newton of Cambridge, England, records the capture of a single specimen of this species from Jamaica. He says: "It is an extremely rare species and I doubt whether a second example has ever been seen in this country. The present was killed by my brother at Hope, in the parish of St. Andrew, February 8, 1879, and was found by him to be a male. I am indebted to the kindness of Mr. Ridgway, of the Smithsonian Institution, for the determination of this specimen of a species I never saw before" (p. 552).

The above example proved to be the first of a series of eight taken in Jamaica by Mr. Edward Newton and now in the Museum of Zoölogy at Cambridge, England. Through the kindness of Professor Newton, I was permitted, last April, to examine these specimens and transcribe the following data concerning the dates and places of capture:

♂ Feb. 8, 1879. Hope, St. Andrews Parish.

♀ Feb. 18, 1879. Port Royal Mt., St. Thomas Parish.

♀ April 8, 1879. Hermitage, St. Andrews Parish.

♀ Oct. 1, 1879. Mt. Elizabeth.

Oct. 7, 1879. Mt. Elizabeth.

♂ Dec. 21, 1881. Mt. Elizabeth.

♀ March 16, 1882. Mt. Elizabeth.

♀ March 16, 1882. Mt. Elizabeth.—C. HART MERRIAM, M. D., *Locust Grove, New York.*

A Specimen of *Helminthophila leucobronchialis* in New Jersey.—A fine male was shot on May 11, 1883, at Maplewood, Essex Co., N. J., feeding in tree-tops on the blossoms of the oak tree. This, I believe is the first specimen for this State.

Not being able to satisfactorily identify the bird I sent it to Mr. E. P. Bicknell, whose remarks on the subject I give, as follows: "The specimen of *Helminthophila leucobronchialis* from Maplewood, New Jersey, is similar to an adult male taken by Dr. A. K. Fisher, at Sing Sing, N. Y., August 29, 1879, and recorded in B. N. O. C., IV, 4, 234. As I recall Dr. Fisher's specimen, the present one differs chiefly in having the yellow breast-band less pronounced, both in color and outline. The wing-bars are narrow, conspicuously separated, and, as in Dr. Fisher's example, whiter than in many individuals of *H. pinus*. The specimen shows one peculiarity which I do not remember to have observed in others, or to have seen recorded, namely, a distinct bleaching of the ashy-blue of the dorsal surface on the rump and proximal tail-coverts. Carried a few steps farther this tendency would have given us a *Helminthophila* with a white rump! This bird is the first for New Jersey. Mr. Brewster alludes to a specimen from Nyack, "New Jersey" (B. N. O. C., VI, 4, 2191). The specimen referred to, however, was from Nyack, Rockland Co., New York, the error in the record being obviously from some mishap in publishing. But Nyack, N. Y., is within a few miles of the New Jersey State line."—C. B. RICKER, *New York City*.

Capture of two more Specimens of *Helminthophila leucobronchialis* at Sing Sing, New York.—On August 11, 1883, I killed two specimens of the so-called White-throated Warbler (*Helminthophila leucobronchialis*). The under parts of both specimens are much more deeply suffused with yellow than is the case in any of my other three specimens; in fact, the yellow on one is evenly distributed over the entire under surface, but is not so deep as in *Helminthophila pinus*.—A. K. FISHER, M. D., *Sing Sing, New York*.

Evidence Concerning the Interbreeding of *Helminthophila chrysoptera* and *H. pinus*.—On July 4, 1885, while collecting specimens in a piece of woods underlaid by a scattering undergrowth, I came upon a female Golden-winged Warbler busily engaged in collecting insects. As I stood watching her she flew to a neighboring cedar tree and commenced to feed a young bird. I immediately shot and killed the latter as the female flew away. The noise of the discharge started another young bird from some bushes near by, and as it flew the female flew and alighted near it. Just as I was on the point of firing they started, and I succeeded in wounding the female only and had to follow and kill her with a second shot. On my return to the place where I first shot at her, I could not find the young one, nor did a careful search disclose it. In advancing for a nearer shot I had a good opportunity of seeing the young bird: it closely resembled its mother in appearance and had no yellow on the breast, whereas the one

killed was the exact counterpart of the young of the Blue-winged Yellow Warbler, with its yellow breast and white wing-bars.

In all probability the father of this interesting family was a specimen of *Helminthophila pinus*.—A. K. FISHER, M. D., *Sing Sing, New York*.

The Loggerhead Shrike in New Hampshire.—On the morning of the 16th of April of this year an unfamiliar bird-note — as of a Robin with a cleft tongue — attracted my attention to a clump of balsams (*Abies balsamea*) in the yard of our nearest neighbor. Here, after a few moments of hide and seek, I discovered the birds to be a pair of these Shrikes (*Lanius ludovicianus*) although at first I quite naturally supposed them to be *Lanius borealis*, with whose acquaintance I have been little favored. For the next ten days the birds were seen continually as they boldly flew about the houses gathering materials for their nest. This they built close to the trunk of one of the balsams, at a distance of about 20 feet from the ground and scarcely more than that from the upper windows of the house. On the 27th one egg was found, and, to anticipate any possible unnatural actions on the part of the birds, was taken. The female, however, soon resumed her oviparous duties so that on May 4 we secured five more eggs. But meanwhile doubts had arisen as to the species; accordingly the birds were shot and have since been identified by the editor of this Journal as *Lanius ludovicianus*.

The nest, which is large for the size of the birds, is composed outwardly of twigs rather loosely joined together by wads of worsted and twine; the inner portion, however, is quite compact, being composed of dried grasses and roots finely interwoven with feathers and soft bits of worsted. The depth of the nest is two inches; its diameter is three inches.

The eggs are of a grayish-white ground-color, entirely covered with small blotches of a sandy-brown of several shades, darkest at the large end. The eggs measure (in inches) 1.01 X .70; .94 X .74; .98 X .70; .96 X .70; .96 X .70; .98 X .66.

While under my observation the Shrikes did not evince a particularly savage or quarrelsome disposition; when the nest was building they enjoyed driving away the Robins, whose customary abode they had pre-empted, yet neither in the trees near at hand, nor in an apple tree about 300 yards distant which the male made his look-out, did we see any evidences of impaled victims. They frequently alighted in the grass, apparently in search of grasshoppers and crickets. Their vocal range was broad; but to our ears disclosed a painful lack of culture; save for an occasional liquid, far-away, tone, like a bit of blue sky seen through angry clouds, — their notes were very harsh and discordant. In concluding I will say that another season will doubtless add further evidence, and sufficient, for the complete establishment of the fact that *L. ludovicianus* is a regular resident in this locality.—EDWIN BRANT FROST, *Hanover, N. H.*

Breeding of *Loxia americana* in the District of Columbia. — In Vol. I of 'The Auk,' p. 292, Mr. Ridgway cites the occurrence of *Loxia americana*

in the vicinity of Washington in May, 1884, and, judging from the worn condition of the plumage of one of the specimens shot—a female—he very naturally surmises that this species, hitherto considered an extremely rare and irregular winter visitant, breeds in this section. This season I was so fortunate as to substantiate this view in a most satisfactory manner. On the 17th of May an adult male and a young bird in the striped feather, barely able to fly, were seen by me in a pine sapling, a short distance beyond the city limits. Attracted to the spot by the call of the parent, uttered for the encouragement of the young, I approached within a few feet, and thoroughly identified the birds. — HUGH M. SMITH, *National Museum, Washington, D. C.*

Non-appearance of Juncos at Montreal.—I am informed by Mr. Ernest D. Wintle that he did not see a Junco in the vicinity of Montreal during the spring migrations of the present year, a most unusual occurrence, as the birds are generally very abundant at that season, although but few of them remain there to breed. Mr. Wintle also writes to me that Mr. W. W. Dunlop and Mr. Paul Kuetzing, also of Montreal, had remarked the entire absence of this species. Mr. Wintle desires to know if anything similar has been observed by readers of 'The Auk.'—MONTAGUE CHAMBERLAIN, *St. John, N. B.*

Familiar Chipping Sparrows.—Miss Katie Hine, of Vienna, Virginia, has for several years past had Chipping Sparrows, *Spizella socialis*, visit her home each summer. The first year it was noticed that one of the pair had the claw missing from the middle toe. This bird came with its mate for three successive years and then ceased its visits. The second year there came also with them another pair, one of which, at least, was suspected to be the young of the first year. Now there are two pairs of adults so familiar that I observed them fly to her feet and clamor for crumbs of bread while we were at the dinner table. In the afternoon they frequently alighted near her and even fed from her hand. They know the window of her bedroom, and each morning they assail the panes of glass, making quite a noise to arouse her for their accustomed food.—L. M. TURNER, *Smithsonian Institution, Washington, D. C.*

Swamp Sparrows and Yellow Rumps.—As the "Wintering of the Swamp Sparrow in Eastern Massachusetts" has been made "a question of evidence," it may be well to give that evidence somewhat more in detail than was before thought necessary, and also to state the reasons for concluding that the birds did pass the winter in Cambridge.

On December 29, 1884, four Swamp Sparrows were seen by Mr. F. H. Hitchcock in a small tangle of weeds and alders on the edge of a stream which runs through the Fresh Pond marshes, but they were so shy and hard to approach that only one of them was shot; this was stuffed by Mr. C. J. Maynard of Boston, who told me that he had never before seen one from Massachusetts in winter. While taking a short walk on the after-

noon of January 31, 1885, I met Mr. Hitchcock, and together we went to the place where he saw the Sparrows on December 29, and also to the one in which they were found by Mr. Lamb in January, 1883.* Quite near the latter locality were the fresh and only partly frozen remains of a Sparrow (an undoubted *Melospiza palustris*, as I afterward made sure by comparison) which had evidently been killed by a Shrike.

From the above it would appear almost certain that the birds were present during the entire month of January, and it is very probable that they might have escaped my notice when I looked for them later. If the original flock consisted of only four there could not have been more than two left for me to find, and in the tangled underbrush, which, in one swampy place at least, extends over several acres, they might easily have eluded me.

I have always considered that any species found here in January was an undoubted winter resident, and its presence at any date during that month sufficient proof of this. Mr. William Brewster tells me that he considers the autumnal migration ended here by December 25, and January, the one winter month when all birds (except such erratic species as Crossbills, Pine Grosbeaks, etc.) are settled for a brief period. If January is not accepted as the test month it will be almost impossible to determine our rarer winter residents, for early in February some of our most hardy spring birds often begin to arrive.

It seems to me it is unsafe to say that "it is hardly possible that Swamp Sparrows passed the winter in Massachusetts in a season so rigorous as was that of 1884-'85 after the middle of January," for there are numerous instances recorded of the wintering of certain birds far north of their usual habitat at that season, even during exceptionally cold winters.† The warm and open character of the winter of 1884-'85 previous to January 18 might also have caused the birds to establish themselves in a locality which they would have been unwilling or unable to leave later.

I think it is almost equally certain that the Yellow-rumped Warblers were also wintering at Pine Point, Maine, as they do regularly at Milton, Mass. (only about ninety miles south), where I have found them every winter for a number of years.—ARTHUR P. CHADBOURNE, *Cambridge, Mass.*

Note on the capture of *Coturniculus lecontei* and *Dendroeca kirtlandi* within the city limits of St. Louis, Mo.—Leconte's Sparrow, male, was taken April 1, 1885, on dry ground in a prairie overgrown with coral-berry bushes (*Symphoricarpus*). The earliness of the date seems to be remarkable. Another specimen, in the collection of Mr. Hurter, was taken in

* Journ. Boston Zool. Soc., II (1883), p. 32.

† I find that the following southern species have been recorded from Eastern Massachusetts during the very cold winter of 1882-'83:—Flock of six *Sialia sialis* (Job, Bulletin Nuttall Club, VIII, 1883, p. 149); two *Molothrus ater* (Spelman, *ibid.*, p. 121); and a *Dendroeca pinus* (Brewster, *ibid.*, p. 120). See also Auk, I, 1884, pp. 294, 295, and Bulletin Nuttall Club, IV, 1879, p. 118.

this vicinity November 10, 1878. These dates may serve to show that the species is a pretty early spring- and a late fall-migrant. In regard to its habits I can only repeat what others have said again and again, namely that it is a great hider. My attention was called to the bird by a low call not unlike the characteristic chirp of the Song Sparrow, but peculiarly sharp and shrill. Going for the bird, it darted out from one bush into another, a distance of about ten yards. I saw it alight in the middle of the bush on the ground and determined to watch the little stranger. I kept my eyes fixed on him for fully ten minutes, but he remained motionless and silent, and his patience seemed unimpaired when mine was all gone.

The capture of *Dendroica kirtlandi*, male, May 8, 1885, is worthy of special mention, as it is the first record of its occurrence west of the Mississippi River. It may also be new to learn that this Warbler is in its general ways mostly like *D. palmarum*. It flew up from the ground on the River des Pires, a few yards from the water, and alighted behind a bush a few feet from the ground. One glance at the bird was sufficient to tell me that it was a Kirtland's Warbler; such a peculiar looking bird it is. Concealing myself I watched the bird for a few minutes, and found that its habits seem to be terrestrial, that it has the same *wagging motion* of the tail as the Yellow Redpole, but that in the carriage of its body and in the manner of evading discovery by skilfully alighting behind a protecting object it resembles *Oporornis*.—OTTO WIDMANN, *St. Louis, Mo.*

On the Feeding Habits of *Phalænoptilus nuttalli*.—Just without the picket fence that encloses in part the parking of my present residence at Fort Wingate, New Mexico, then runs a wide board-walk. Beyond this is a broad, well-kept gravel road, standing between the former and an open level plot of ground of about an acre's extent. For a number of evenings past my neighbors have tried to induce me to come out and see a strange-acting bird that disported itself in this roadway, between twilight and dark. I paid little heed to this, as from its description I believed it to be the half-grown young of the *Chordeiles* of this region, which is very abundant in the neighborhood. Last night, however, the bird having been described to me as a small Owl with a white throat, by one of its observers, I took my cane-gun and made a search for it up and down the road-way. I had not far to go, when, as well as I could see by the light of a very young moon, I noticed a small, dark-brownish looking bird apparently amusing himself by making short jumps of two feet or more up in the air, then resting on the road to repeat the performance in a moment or so. Another was going through similar capers on the broad walk. They seemed to be perfectly oblivious to my presence, and, indeed, some children further along were trying to catch them with their hands. As I had never heard the note of the Poor-wills in the vicinity, it did not strike me at first that it might be this bird; moreover, its action was so odd that I hardly knew what to make of it. At any rate one soon noiselessly lit, like a great, gray moth, directly in front of me in the road, but a few feet distant. It was extremely difficult to see him, and it was more

by good luck than good shooting that the little pinch of shot from my cane-gun knocked him over, though the weapon rarely fails me in daytime. I immediately ran up to my study with my prize, where I discovered that I had killed a fine specimen of Nuttall's Poor-will. As the skeleton of this bird had long been among my desiderata, the skin and its beautiful plumage was soon stripped off, whereupon I was much surprised to find in its mouth some four or five quite sizable moths, and the upper portion of the œsophagus filled with a wad of a dozen or fifteen more. Fully half of these were yet alive, and two or three managed to fly away when freed from the bodies of their more disabled companions. This, then, is what the bird was up to; instead of flying about as a Nighthawk does, taking his insect prey in a conspicuous manner upon the wing, he captures it in the way I have described above.

To-night the moon is twenty-four hours older, and the evening proportionately brighter, but a careful search for over half an hour failed to discover a single specimen of the bird on the same ground. I am not aware that any of the other Caprimulgidæ have similar habits.—DR. R. W. SHUFELDT, *Fort Wingate, New Mexico.*

Colaptes auratus in California.—During the early part of January, 1885, I took at this place a female of a species I at first thought to be *C. hybridus* Baird, but which I soon became satisfied was *C. auratus*; and upon consulting Mr. Robert Ridgway, who examined the bird, I found my conclusion correct. The bird had been observed for nearly a fortnight frequenting a house near by, and at last it paid with its life for its persistency. Soon after I saw two others of this species, but as I had no gun with me at the time they escaped, much to my regret. I am of the opinion that this bird frequents California more than is supposed, and is overlooked through being mistaken for *C. mexicanus*, which it much resembles, and which is so common as not to be collected in great numbers; and hence the few scattered specimens of *C. auratus* which may visit us are thus overlooked. We have at this place, and in fact all through the southern part of the State, at regular intervals, and lasting generally three days, heavy wind storms, amounting at times almost to tornados. The bird was first seen just after one of these wind storms, and it may be that this had something to do with the bird's having wandered so far from its accustomed haunts, but this seems very improbable. This, the only specimen that I have ever heard of as taken on the Pacific coast south of Sitka, is now the property of the National Museum, to which it was contributed by me.—FORREST BALL, *San Bernardino, Cal.*

A Hawk Owl (*Surnia ulula caparoch*) at Chatham, Mass.—I am informed by Mr. Augustus W. Baker, of Chatham, Mass., that a Hawk Owl was shot at Chatham during the winter of 1883-'84. The specimen was not preserved, nor can the exact date be given, but Mr. Baker's intelligent and very accurate description of the bird, which he carefully examined, renders the record otherwise satisfactory and not in the least open to doubt.—J. A. ALLEN, *American Museum of Natural History, New York City.*

Another Richardson's Owl in Massachusetts.—As *Nyctala tengmalmi richardsoni* has been so seldom taken so far south as this point (central Eastern Massachusetts), it may be well to record an additional example. I have in my collection a fine specimen obtained in this place on Jan. 1, 1885. It was approached without difficulty in broad daylight by a wood-chopper and killed with a stick.

This is about the southern limit of the range of the species as at present determined. I find but three examples on record to the south of this; the early one of Dr. Wood for Connecticut in 1859, and the two obtained in 1881 and 1882 near Providence, R. I., as reported by Mr. Jencks in the 'Nuttall Bulletin' of April, 1881, and April, 1883.

The circumstances of this capture indicate the defective day-vision characteristic of the strictly nocturnal species, in accordance with Richardson's statement: "It is so much dazzled by the light of the sun that it becomes stupid and may easily be caught by hand."—F. C. BROWNE, Framingham, Mass.

The Oyster-catcher (*Hæmatopus palliatus*) in Massachusetts.—Mr. Warren Hapgood tells me that during the last week of April, 1885, he received an Oyster-catcher in the flesh from Chatham, Mass. It was shot on Monomoy Island by Alonzo Nye, the veteran gunner of Chatham. It was in fine plumage, and is now preserved in Mr. Hapgood's collection. If I remember rightly this is only the third specimen known to have been taken in Massachusetts, the other two being the pair mentioned by Dr. Brewer (Water Birds, Vol. I, p. 113), and now in the New England collection of the Boston Society.—WILLIAM BREWSTER, Cambridge, Mass.

The Baird's Sandpiper (*Actodromas bairdii*) at Locust Grove, New York.—August 18, 1885, while Dr. C. H. Merriam and the writer were driving along a country road at the above locality we discovered a solitary Baird's Sandpiper on the edge of a small, temporary pool of water formed by the recent rains. It was a female of the year in fine plumage, and was evidently a straggling migrant which had dropped down hap-hazard to feed and rest. Most of the eastern stragglers of this species hitherto recorded have been from the Atlantic coast, but undoubtedly the bird occurs more or less commonly all the way across the interior country.—H. W. HENSHAW, Washington, D. C.

A Bird New to Massachusetts.—Among the Sandpipers collected by me years ago in Massachusetts I find a single specimen of the Western Sandpiper (*Ereunetes occidentalis*), taken on Long Island, Boston Harbor, Aug. 27, 1870. It was one of a number of 'Peeps' shot on that day, and it is by no means unlikely that the lot contained others of this species, which were overlooked under the impression that they were all the common species, *E. pusillus*. Like the Baird's Sandpiper, this species may be expected to occur in small numbers along the Atlantic coast during the migrations, especially in fall.—H. W. HENSHAW, Washington, D. C.

Ereunetes occidentalis on the Lower Potomac.—Respecting the occurrence of the Western Sandpiper in the Eastern States, the only published record is that of C. W. Beckham, of Washington, in 'The Auk,' Vol. II, p. 110. This gentleman speaks of several specimens shot at Virginia Beach, Va., September 6-7, 1884. By way of throwing a little additional light on the range of the species, it may not be wholly amiss to state that during the last week of August of the present year I found the western bird quite as common as the eastern, at Piney Point, Md., on the Potomac River. If anything the former was the more numerous, for of eighteen specimens of *Ereunetes* preserved, fourteen were identified by Mr. Ridgway as *occidentalis*, and these, too, were taken at random from a lot of about twenty-five dead birds.—HUGH M. SMITH, *National Museum, Washington, D. C.*

The Great Marbled Godwit at Portland, Maine.—Late in May, 1884, a specimen of the Great Marbled Godwit (*Limosa fæda*) was shot by a Portland sportsman on Scarborough Marsh. The weather being warm at the time the captor of the bird sent his trophy at once to a taxidermist but I was given an opportunity of examining it as soon as its preservation was secured. I make a note of this specimen because it is the only one which I know to have been taken in the vicinity of Portland during my observations there, or between the years 1870 and 1885. A generation ago, in the days of the famous Maine sportsman, 'Cale' Loring, the Marbled Godwit appears to have been at least an occasional visitor to the Scarborough Marshes. In the journal which Loring left, there is, I am told, not infrequent mention of this species, and no Portland sportsman will question the authenticity of such records. Of late years, however, the birds have evidently not looked with favor upon their old-time halting-places.—NATHAN CLIFFORD BROWN, *Portland, Maine.*

The Little Yellow Rail (*Porzana noveboracensis*) in Kansas.—Prof. L. L. Dyche, Curator of Birds and Mammals, State University, Lawrence, writes me that April 18, 1885, he captured one of these birds (a female) on low wet land, about five miles southeast of Lawrence. I have seen the specimen, which is mounted and on exhibition in the fine collection under his charge.—N. S. GOSS, *Topeka, Kans.*

Harelda hyemalis in Maryland in Summer.—On the 27th of July, 1885, a Duck, which I supposed was *Aix sponsa*, was seen swimming in the Potomac River near Piney Point, Md. After a time it came to the shore, and approaching it rather cautiously I had no trouble in catching it, as it made no attempt to use its wings. It proved to be a male Long-tailed Duck, in slightly worn plumage. One wing showed signs of injury; the upper coverts were gone, leaving bare the bases of the primary quills; and there was an eminence on the humerus, indicating a fracture of that bone. Without doubt the presence of the bird in these waters at this season was due entirely to the diseased wing. The specimen has been mounted for the National Museum, in the collection of which it bears the number 105,301.—HUGH M. SMITH, *National Museum, Washington, D. C.*

An Albino Surf Duck (*Edemia perspicillata*).—Some time since Mr. Alfred J. Leavitt, keeper of the Boon Island (Maine) light-house, sent me drawings of a 'curious Duck' which was shot at that place October 13, 1884, by Mr. H. Z. Ellis. After some correspondence Mr. Ellis has kindly sent me the specimen for examination. It proves to be an Albino Surf Duck (*Edemia perspicillata*). Mr. Ellis writes me that it "headed a flock of Coots," and that its eyes were "jet black." The bird is not pure white. The throat, under parts, sides of head and neck, and part of the wing-coverts and tail are soiled white. The top of the head, a line down the back of the neck, and the wings are pale bleached brown. The markings are symmetrical.—C. HART MERRIAM, *Locust Grove, N. Y.*

On the Alleged Occurrence of the Pacific Eider in Labrador.—Mr. W. A. Stearns, in a paper entitled 'Notes on the Natural History of Labrador,' published in the 'Proceedings of the U. S. National Museum,' Vol. VI, 1883, says (p. 121) that the *Somateria v-nigra*, the Pacific Eider, is "abundant in large flocks in spring," and that he himself "obtained specimens that had the decided 'V-shaped black mark' on the chin." The statement has been doubted, and critics have considered it a mild expression when saying that it "seems to require confirmation." It is not my intention to defend Mr. Stearns's identification, but having found a notice which seems to point in the same direction, I think it safer to postpone a final decision in the matter. The notice to which I allude is found in Degland and Gerbe's 'Ornithologie Européenne' (Paris, 1867), II, p. 557, where, under the head of *Somateria mollissima*, Mr. Gerbe writes: "Three or four specimens received from Newfoundland had under the throat two black lines similar to those of *Somateria spectabilis*, but of a color less deep. May they not be mules between the latter and the female Eider?"

"Mr. de Sélys-Longchamps, in his second note on the hybrids of the Anatidæ,* in quoting this example, remarks that Prince Ch. Bonaparte and Mr. W. Jardine consider these specimens as a distinct species, which they name *Somateria v-nigrum*, but that there is occasion to wait for new observations before deciding."—LEONHARD STEJNEGER, *Smithsonian Institution, Washington, D. C.*

A New Petrel for North America.—On the 2d of September, 1885, there was captured on board the U. S. Fish Commission Steamer 'Albatross' (Capt. Z. L. Tanner, Commander), in latitude 40° 34' 18" N., 66° 09' W., a specimen of the White-faced Stormy Petrel, *Pelagodroma marina* (Lath.). Mr. James E. Benedict, resident naturalist of the 'Albatross,' writes me that it was "taken on the ship late in the evening of the 2d proximo," and that "it was in all probability attracted by the light and fell on the deck, from which it seemed unable to rise." He adds that no more of the same species were seen during the cruise, though Petrels of other kinds were numerous around the ship.

* Bull. Acad. Bruxelles, 1856, XXIII C; Naumannia, 1856, p. 397.—L. S.

The capture of this specimen makes the second record, so far as the writer is aware, for the Atlantic Ocean, the species belonging properly to the 'South Seas,' especially in the neighborhood of Australia and New Zealand. The two other Atlantic records are the Canary Islands (*vide* Webb and Berthelot), and near the mouth of the Rio de la Plata. The latter refers to the specimen upon which the species (*Procellaria marina* Lath.) was originally based, while the former is the basis of *Procellaria hypoleuca* Webb and Berth. — ROBERT RIDGWAY, *Washington, D. C.*

Probable Occurrence of *Diomedea exulans* in Florida. — Mr. B. H. Barrett, writing from Jacksonville, Fla., under date of September 14, 1885, says: "Sometime during the month of May a great Wandering Albatross was seen at the mouth of the St. John's River twenty miles below this city. Knowing it to be a very rare occurrence, I questioned several who saw the bird, and from their description I have no doubt of its authenticity." A later letter from Mr. Barrett relating to this occurrence is accompanied by a letter from Mr. Alfred Ames Howlett, one of the fortunate observers of the bird, from which I quote the following: "In reply to your request for a statement regarding an Albatross that I told you I had seen at the mouth of the St. John's River this year, I would say that I was in the pilot-house of my tug, the 'J. E. Stevens,' talking with Captain N. Broward, when I discovered a large bird hovering near the surface of the water in the channel near 'Ward's Bank,' and on coming nearer the bird arose and circled within seventy-five yards of the tug, and I *positively identified* it as an Albatross; and on the return of the tug I carried my gun with me and, although seen again I was unable to get within shot. The last seen of the bird it was winging its way seaward. . . . I am positive of the bird's identity from mounted specimens I have seen and from ornithological works I have read." — ELLIOTT COUES, *Washington, D. C.*

The Bill of the Horned Puffin (*Ceratorhina monocerata*). — While at Santa Barbara and San Diego, Cal., in November and December, I had the opportunity to examine a number of specimens of this species, probably not fewer than twenty, old and young. Considering the abundance of the bird off the California coast, and even in the harbors, its rarity in collections is somewhat surprising. These Puffins are tame enough, as a rule, to be approached and shot without difficulty, and even when they dive they do not remain under long, and may be followed by observing their course and obtained with very little trouble. Enough specimens may, however, be secured (or could in December, 1884) by a walk along the beach of San Diego Bay, or anywhere on the coast, after a storm, when considerable numbers are cast up by the waves in a state of perfect preservation — apparently drowned, for they show no signs of violence, either externally or internally.

It was interesting to observe that the curious upright horn-like appendage of the bill, which writers appear to consider more or less peculiar to the breeding season, was present in all specimens examined, in shape of

a fleshy protuberance or knob near the base of the upper mandible. Upon looking up Cassin's description of the *Cerorhina suckleyi*, now known to be the young of the present species, and Dr Coues's account of this bird in Proc. Acad. Nat. Sci. Phila., 1868, I find that the young Horn-billed Puffin, just casting the downy plumage, is described as having this same fleshy knob on the bill. As my specimens show that the knob is present in winter, I am inclined to believe that the fleshy knob is really entirely persistent, and is the matrix or core, so to speak, of the horny excrescence, which latter is superimposed upon it only on the near approach of the mating season, and shed at its end, leaving a 'horn' behind, though quite devoid of its horny sheath. In ordinary museum specimens this tough membranous knob is not apparent, having so dried away and shrunk to the bill as to have lost its distinctive character.

It is to be hoped that California collectors will be able to furnish a series of notes on the bill of this species, showing its character at the several seasons. At present the matter cannot be said to be fully understood.—H. W. HENSHAW, *Washington, D. C.*

A Crested Auk on the Massachusetts Coast.—While on a recent collecting trip to Chatham, Mass., I was asked by Mr. A. W. Baker, an intelligent and trustworthy gunner and fisherman of that place, to give him the name of a bird killed at Chatham during the winter of 1884-'85, which he described as being very much like the Little Auk or Dovekie in form and color, though a little larger, and having a tuft of narrow, pointed feathers on the front of the head, curving upward and forward. From his minute description of the bird it was evidently one of the Little Crested Auks, apparently *Simorhynchus cristatellus*—a bird he had otherwise never seen or heard of, but which he very accurately described. That the bird was one of the Little Crested Auks there can be no doubt.

The occurrence of such a bird on the Massachusetts coast is of course entirely accidental and surprising. We have, however, the Tufted Puffin (*Lunda cirrhata*) recorded from Greenland and the coast of Maine, the Black-throated Guillemot (*Synthliborhamphus antiquus*) from Wisconsin (cf. Sennett, Auk, I, p. 98), and the Paroquet Auk (*Cyclorhynchus psittaculus*) from Sweden, showing that these Northwest Coast species of Alcidae are more or less given to wandering to points far remote from their proper habitats.—J. A. ALLEN, *American Museum of Natural History, New York City.*

The Thick-billed Grebes (*Podilymbus podiceps*) Breeding in Kansas.—B. L. Bennett and V. L. Kellogg of Emporia, Kans., both report finding, May 26, 1885, in a pond or slough near the city, quite a number of the nests of this bird containing from five to ten eggs each.—N. S. Goss, *Topeka, Kans.*

CORRESPONDENCE.

[Correspondents are requested to write briefly and to the point. No attention will be paid to anonymous communications.]

Republication in 'The Auk' of Descriptions of New North American Birds.—A Suggestion.

TO THE EDITORS OF THE AUK:—

Sirs: I would like to make a suggestion or two in relation to 'The Auk' as the organ of the A. O. U. One is that in future descriptions of new species or varieties of North American birds, unless originally published in 'The Auk,' be republished in that journal in the next succeeding number, either verbatim or with sufficient fullness to give the diagnostic points, habitat, etc., of the new forms. This may seem objectionable to the (comparatively) few ornithologists to whom the original descriptions are always promptly sent; but many first hear of the new forms by a brief statement in 'The Auk,' announcing the fact of their description, long after the original description appeared. Probably on an average less than two pages of each number would suffice for such a purpose, and I do not think they could be used in a more satisfactory way. I understand the reason for publishing certain descriptions in such a medium as, for instance, the 'Proceedings' of the Biological Society of Washington, but that does not make such place of publication any less inconvenient to many readers of 'The Auk.'

The second suggestion is that each new form, when described, *if recognized by the authority that is about to publish the standard list of North American birds*, be given a special number or designation by which it shall be known in check lists, indicating its position among its allies, and the official opinion of admitted authority as to its claims to recognition.

It seems to me that both these suggestions are practical and useful.

J. C. MERRILL, U. S. A.

Columbus Barracks,

Columbus Ohio, August, 1885.

NOTES AND NEWS.

As previously announced, the annual meeting of the American Ornithologists' Union will be held in New York City, beginning Tuesday, November 17. The place of meeting will be, as previously, at the American Museum of Natural History, 77th Street and 8th Avenue. In addition to the reports of Committees, and the usual routine business of such an occasion, it is hoped that a good list of scientific papers will be presented, and that the meeting will be fully attended.

At the September meeting of the Ridgway Ornithological Club of Chicago, Dr. Alfred Dahlberg was elected to membership, and a paper by Mr. F. L. Grundvig, entitled 'Notes on the Habits of the Birds of Outagamie County, Wis.,' was read.

THE A. O. U. Committee on the Classification and Nomenclature of North American Birds are pleased to believe that the results of their labors will soon be accessible to the public. Their report, the character of which has already been indicated (see *anted*, pp. 318), will form an octavo volume of about 300 pages, and will doubtless be on sale by December 1, and possibly at the time of the annual meeting of the Union in November. Information as to price, etc., may be found in the advertisement pages of the present number of 'The Auk.'

UNDER the title 'A Nomenclature of Colors for the use of Naturalists, and a Compendium of Useful Knowledge for Ornithologists,' Mr. Robert Ridgway has prepared a work, shortly to be published by Little, Brown & Co., of Boston, that cannot fail to be of great convenience and usefulness to naturalists in general, and ornithologists in particular. The work will make an octavo volume of about 150 pages, illustrated by ten colored plates, and several others of outline figures, uncolored. It consists, as the title indicates, of two parts; the first, 'Nomenclature of Colors,' embracing a general dissertation on the principles of color, a chapter of useful hints on the technique of the subject, and an extensive vocabulary of colors, as designated in most of the current European languages. The second part, or 'Ornithologists' Compendium,' includes a glossary of terms used in descriptive ornithology, a comparative scale of standard systems of linear measurement, as the English and the decimal, and tables showing the equivalent of the English inch and its subdivisions in centimeters. The plates, besides representing, with their names, nearly two hundred more or less distinct tints, give the outlines of the principal forms of color-making, outline figures of egg-contours, and details of the external anatomy of birds, with reference to the terms used in descriptive ornithology. The work is the result of years of labor on the part of the author, whose fitness for the task, both as an artist and an ornithologist, is too well known to require comment. The need of a work of just this unique and useful character has long been felt by all working naturalists, and its appearance will doubtless be welcomed as a valuable boon.

THE Smithsonian Institution has recently accepted for publication from Dr. R. W. Shufeldt, U. S. A., a collection of memoirs on the osteology of birds. They will make an octavo volume of some 400 pages, illustrated with 18 lithographic plates and nearly 200 cuts in the text, forming by far the most extensive publication on this subject this country has yet produced. Collectively these memoirs will be entitled 'Contributions to the Anatomy of North American Vertebrates.' The first is on the osteology of *Circus*, and is intended as an introduction to the osteology of the North

American Falconidæ. The second, entitled 'Osteological studies of the Subfamily Ardeinæ,' presents a full account of the skeleton in *Ardea*, with references to other genera of Herons. The third, and by far the most important, is devoted to the 'Osteology of the North American Alcidiæ,' and includes comparisons with several of the higher groups. Dr. Shufeldt having had in his hands the entire collection of the skeletons of the Arctic birds gathered by the Alaskan expeditions, his extensive material will doubtless enable him to throw much light upon the affinities of the groups treated, so far as their osteology may serve to indicate them, since his results, we understand, are to be given in great detail, in the form of carefully prepared analytical tables.

DR. William Wood, the well-known Connecticut ornithologist, died suddenly at his residence in East Windsor Hill, Conn., on Sunday, August 9, at the age of 63 years. He was born at Somers, Conn., and was the son of the Rev. Luke Wood of that town. In 1861 he published in the 'Hartford [Conn.] Times' a series of twenty-one original papers on the 'Raptacious Birds of Connecticut,' and since that date articles from his pen on the same and a few other species have appeared, from time to time, in the 'American Naturalist,' 'Familiar Science and Fancier's Journal,' 'Ornithologist and Oölogist,' and in the 'Hartford Times.' His collection of birds and eggs is quite extensive, being especially rich in examples representing the different phases of plumage of the Hawks. We understand that an effort is being made to have the entire collection, including his mammals and numerous Indian curiosities, removed to Hartford, Conn., for permanent preservation.

DR. H. A. Atkins, a well-known ornithologist of Michigan, died at his home in Locke, Ingham Co., Mich., on the 19th of May, at the age of 63 years. Dr. Atkins was a frequent contributor for many years to the 'Ornithologist and Oölogist,' and occasional notes from his pen were published in the 'Bulletin' of the Nuttall Ornithological Club, the 'American Naturalist,' and elsewhere.

SEVERAL new natural history serials have appeared within the last three months which give more or less attention to ornithology, among which are the following: 'The Hoosier Naturalist,' published monthly at Valparaiso, Ind., of which the first number is dated August, 1885; 'The Naturalists' Companion,' a monthly published at Brockport, N. Y., the first number of which is dated July, 1885; and 'The Agassiz Journal,' a monthly published at Lynn, Mass., of which three or four numbers have already appeared. With this journal has been merged 'The Young Oölogist,' formerly published at Albion, N. Y., and also the 'Naturalists' Advertiser and American Osprey.' 'The Museum,' formerly published at Philadelphia, has been merged with the 'American Antiquarian,' published at Clinton, Wisc.

DURING the present year the British Museum has received three especially noteworthy accessions to its collection of birds. "The first is the celebrated collection of American Passeres, formed by P. L. Sclater, Esq., F. R. S., in the course of the last thirty years. It contains most of the material on which the majority of the publications of this ornithologist were based, and is, perhaps, the first collection of its kind that was made, at least in this country, with a clear understanding of the great importance of well-ascertained localities." The second is the celebrated Salvin-Godman collection. "Formed with the same care as the Sclater collection, it surpasses this latter as regards the number of specimens, illustrating more fully the geographical range and diversity of plumage of each species. Besides the specimens obtained by the donors themselves during their travels in Central America, or by collectors who worked for them, it contains a very complete series of South American birds." The third is the immense Hume collection of Asiatic birds, which has lately been transferred from Simla under the personal superintendence of Mr. Sharpe himself. This, doubtless the largest private collection of birds ever formed, filled eighty-two large cases when packed for transportation, and numbers about 63,000 skins, besides 300 nests, and 18,600 eggs. About 2000 species are included, so that in the average each species is represented by a series of about thirty skins. Of the considerable number of duplicates that will be eliminated, a complete set has to be transmitted, by the wish of the donor, to the Museum of Comparative Zoölogy at Harvard College.

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